THE ARTE OF LOGICK.

Plainely taught in the *Engliſh* tongue, according to the beſt approued AVTHORS.

Very neceſſary for all STVDENTS in any *Profeſſion, how to defend any Argument againſt all* ſubtill Sophiſters, and cauelling Schiſmatikes, and *how to confute their falſe Syllogiſmes, and* captious Arguments.

By M. BLVNDEVILE.

LONDON,

Printed by *William Stansby*, and are to be ſold by *Matthew Lownes*.

1617.

208379

To the Reader.

MInding here to treate of the Art of Logike in our vulgar tongue, for the profit of thoſe my Countrymen, that are not learned in forreine tongues: I thinke it no ſhame nor robbery to borrow termes of the ſaid Art from the Latines, aſwell as they did from the Greekes: and ſpecially ſuch termes as cannot be aptly expreſſed in our natiue ſpeech: and yet therewith I doe not forget plainly to ſhew the ſignification of euery ſuch terme, ſo as euery man may eaſily vnderſtand what each terme ſignifieth: thinking it much better ſo to doe, then to fayne new wordes vnproper for the purpoſe, as ſome of late haue done. And as my minde is hereby to pleaſe the vnlearned, that are deſirous of learning, hauing both good wits, and alſo good diſpoſition with aptneſſe to learne. So my hope is not to offend the learned, who, I am ſure doe well allow of Ariſtotle, in ſaying, that euery good thing, the more common it be, the better it is: neither are they ignorant, that in old time paſt, aſwell the Greekes as the Latines, of what Art ſoe-

uer they wrote, each one wrote the ſame, for the moſt part, in his owne vulgar ſpeech. Euery man is not able in theſe coſtly dayes, to finde either himſelfe or his Child at the Vniuerſitie, whom if God notwithſtanding hath indued with a liuely wit, and made him ſo apt to learning, as hauing ſome helpe at home, he may by his owne induſtry, attayne vnto right good knowledge, & be made thereby the more able to glorifie God, and to profit his Countrey. Truly, I ſee no cauſe why the learned ſhould diſdayne, or be miſcontent that ſuch Man or Child ſhould be freely taught this or any other good Art, without any coſt or charge. Wherefore arming my ſelfe with aſſured hope, that with this my labour, I ſhall greatly profit and pleaſure the vnlearned, and not hinder or diſpleaſe the learned, I will boldly follow mine enterpriſe, and here briefly ſhew the order of my ſaid Worke, which is diuided into ſixe Parts or Bookes: for ſith Logicke is chiefly occupyed in diſcuſſing of Queſtions, and that ſuch queſtions, both ſimple and compound doe ſpring of wordes, the firſt Part of my Booke ſhall treate of Wordes, ſhewing which be Simple, which be Compound, and alſo which comprehend more, and which comprehend leſſe: & which be of affinitie, and which be not: leauing out no neceſſary Rules belonging thereunto, that are taught either by Ariſtotle, or by any other Moderne writer:

Se-

Secondly, becauſe all ſimple queſtions conſiſting of ſingle wordes, are to be diſcuſſed by Definition and Diuiſion: the ſecond Part treateth of them both, and therewith ſheweth alſo with what methode and order ſuch ſimple queſtions are to be handled. Thirdly, becauſe all compound queſtions are to be diſcuſſed by reaſoning or argumentation, and that euery kinde of argument doth conſiſt of Propoſitions: the third Part treateth of a Propoſition, and of all things belonging thereunto. Fourthly, becauſe no ſound argument can be made to proue or diſproue any thing that is in queſtion, vnleſſe the Diſputer know from whence to fetch his proofes: the fourth Part of my Booke treateth of all the places from whence any argument is to be fetched. And the fifth Part treateth of Argumentation, and of all the kindes thereof, teaching how euery kinde is to be performed. The ſixt and laſt Part treateth of Confutation, ſhewing how all Sophiſticall arguments are to be confuted.

(***)

A Poſtſcript.

THough I wrote this Booke many yeeres paſt, whil'ſt I ſojourned with my moſt deare Brother in Law, *M. William Hurnell*, a man of moſt ſingular humanitie, and of great hoſpitalitie, at his houſe in Winkborne in Nottinghamſhire, not farre from Southwell: yet notwithſtanding vpon diuers neceſſarie conſiderations (as I thought) ſince that time mouing me thereunto, I ſtill ſtayed it from the Preſſe, vntill now of late that I was fully perſwaded by diuers of my learned friends, to put it in print, who hauing diligently peruſed the ſame, and liking my playne order of teaching vſed therein, thought it a moſt neceſſary Booke for ſuch Miniſters as had not beene brought vp in any Vniuerſitie: to many of which Miniſters though God had giuen the gift of vtterance, and great good zeale to ſet forth in good ſpeech the true Chriſtian doctrine: yet, if they ſhould haue to deale with ſubtill Sophiſters and caueling Schiſmatikes (whereof in theſe dayes, the more is the pitty, there are too many) they were not able without the helpe of Logike, to defend the truth of Gods Word, and orderly to confute ſuch falſe Concluſions as peruerſe Schiſmatikes and Heretikes are wont to gather out of the very wordes of holy Scripture: wherefore, through my ſaid friends perſwaſions, I haue now at length committed my ſaid Booke to the Preſſe, praying all thoſe that ſhall vouchſafe to reade it, as thankefully to accept the ſame, as of my part it is friendly offered:

Vale.

The

The Contents of the Chapters contayned *in theſe ſixe Bookes of* Logicke.

The First Booke.

Treating of a Queſtion, and of Wordes, both Singular and Vniuerſall.

WHat Logicke is, of what parts it conſiſteth, and whereto ſuch parts doe ſerue. Which be the two chiefe offices of Logicke, and wherein Logicke is chiefly occupyed, that is in diſcuſsing of Queſtions, which is done by Definition, Diuiſion, and Argumentation. Chap. 1.

What a queſtion is, and that euery queſtion is either ſimple or compound, alſo of what parts a compound queſtion conſiſteth (that is to ſay) of two parts, called the Subiect and the Predicate, and what thoſe termes doe ſignifie. Becauſe all queſtions doe conſiſt of wordes either ſimple or compound, in this Chapter are ſet downe three principall diuiſions of wordes. Firſt, which be ſimple, and which be compound. Secondly, which be of the firſt intention, and which be of the ſecond intention: and thirdly, which be ſingular, called in Latine Indiuidua, *and which be vniuerſall.* Chap. 2.

What Indiuiduum *is, and all the foure kindes thereof (that is)* Indiuiduum determinatum, Indiuiduum demonſtratiuum, Indiuiduum vagum, *and* Indiuiduum ex hypotheſi *(that is to ſay) by ſuppoſition.* Chap. 3.

Of vniuerſall wordes, whereof ſome are called Predicables, and ſome Predicaments, and firſt of the fiue predicables (that is) Genus, Species, Differentia, Proprium, *and* Accidens, *and how euery one is diuided, and to what vſes they ſerue, but firſt of* Species, *and then of the reſt.* Chap. 4.

Of

Of Predication, and of the diuers kindes thereof. Chap. 5.

Of the ten Predicaments in generall, which be these, Substantia, Quantitas, Qualitas, Relatio, Actio, Passio, Vbi, Quando, Situm est, *and* Habere. Chap. 6.

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What Action is, and how it is diuided, and what properties doe belong thereunto. Chap. 12.

What Passion is, and what properties doe belong thereunto. Chap. 13.

What the Predicament Vbi *is, and how it is diuided, and what properties doe belong to that Predicament.* Chap. 14.

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The diuers significations of the predicament Habere, *also what wordes it comprehendeth, with a Table shewing the same, and finally what properties it hath.* Chap. 17.

The

The manifold vſes of the aforeſaid ten predicaments. Chap. 18.

Of the Poſtpredicaments, *which are in number fiue, that is,* Oppoſitio, ante *and* poſt, ſimul, motus, *and* habere, *and firſt of Oppoſition, and how many things are ſaid to agree together, to be diuers, or to be contrary one to another.* Chap. 19.

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Of the Poſtpredicament Motus, *ſhewing how many kindes of mouings there be.* Chap. 22.

How many wayes the word Habere *is to be vnderſtood.* Ch. 23.

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Treating of Definition, and of Diuiſion, and of Methode.

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How many Precepts are to be obſerued to make a true definition. Chap. 2.

Of Diuiſion, and of the diuers kindes thereof. Chap. 3.

How many Precepts are to be obſerued to make a true Diuiſion. Chap. 4.

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The Third Booke.

Treating of a Propoſition.

OF a Propoſition, ſhewing of what parts it conſiſteth, and how many wayes it is diuided, and what queſtions are to be asked

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Of the Lawes and conditions belonging to the foure Oppoſites, and alſo of the threefold matter of a propoſition, that is, Naturall, Caſuall, and Remote, and then of Oppoſition, ſhewing how many wayes ſimple propoſitions are ſaid to be oppoſite one to another. Ch.3.

Of the Equiualency of ſimple propoſitions. Chap.4.

Of the Conuerſion of ſimple propoſitions, ſhewing how manifold it is. Chap.5.

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Of Equiualency and Conuerſion of Modall propoſitions. Chap.9.

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Treating of Logicall places.

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Of outward places, ſhewing how Arguments are to be fetcht from euery ſuch place, together with the generall Rules or Maxims belonging to the ſame. Chap.4.

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Of the ſixe inartificiall places comprehended vnder the place of antheritie, whereunto is added a Table of authoritie. And in this Chapter is not only declared to what end the knowledge of all the foreſaid places doe ſerue, but alſo it ſheweth by one example how to vſe them when neede is, either to proue or to dilate any Theame, which example is taken out of Hunneus. *The Theame whereof is thus*: Man ought to embrace Vertue. Chap.6.

The Fift Booke.

Treating of Argumentation, and of Demonſtration.

OF Argumentation, and of the foure kindes thereof in generall, and alſo of the firſt principles of a Syllogiſme, aſwell materiall as regular. Chap.1.

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What that matter and forme is, and that the matter conſiſteth of

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The Sixth Booke.

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Confutation is twofold, whereof the one belongeth to the Perſon, the other to the Matter: and that of Matter is diuided into two kindes, that is, Generall and Speciall, and the generall confutation is done three manner of wayes, that is, either by denying the Conſequent, by making diſtinction, or elſe by inſtance, any of which three wayes, when it is to be vſed, is here ſet downe. Chap. 1.

Of ſpeciall confutation, ſhewing how it is done, and what order Ariſtotle

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Of Diſputation, and ſheweth how manifold it is. Chap.3.

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Of the ſeuen Fallaxes conſiſting in Things, and ſheweth by examples how to confute the ſame. Chap.6.

THE

THE ART OF *LOGICKE.*

THE FIRST BOOKE.

CHAP. I.

Of the Art of Logicke, and of the parts and offices thereof.

What is Logicke?

Logicke is an Art, which teacheth vs to diſpute probably on both ſides of any matter that is propounded.

Of what and how many parts doth it conſiſt?

Of two: that is, Inuention and Iudgement.

Whereto ſerue theſe parts?

Inuention findeth out meet matter to proue the thing that yee intend: and Iudgement examineth the matter, whether it bee good, or not; and then frameth, diſpoſeth, and reduceth the ſame into due forme of argument.

What is the chiefe end or office of Logicke?

The chiefe end or office of Logicke is twofold: The one to diſcuſſe truth from falſhood in any manner of ſpeech; the other is to teach a compendious way to attaine to any Art or Science.

And therefore it is defined of ſome, to be the Art of Arts, and Science of Sciences; not for that it teacheth the principles of euerie Art or Science, (for thoſe are to be learned of the Profeſſors of ſuch Arts or Sciences) but becauſe it ſheweth the method, that is to ſay, the true order and right way that is to be obſerued in ſeeking to come to the perfect knowledge of any Art or Science. Of which methodicall part, mine old friend, *M. Iacomo Acontio Tridentino* hath written in the Latine tongue a very proper and profitable Treatiſe. And therefore I minde here to deale onely with the firſt office, which is to diſcuſſe and to diſcerne truth from falſhood in any ſpeech or queſtion that is propounded.

How is that to be done?

By three ſpeciall inſtruments: that is, by Definition, Diuiſion, and Argumentation: whereof wee ſhall ſpeake hereafter in their proper places. In the meane time, becauſe queſtions are the matter wherein Logicke is chiefly occupied, wee will ſpeake firſt of a queſtion.

CHAP. II.

Of a queſtion, and of certaine diuiſions of words.

What is a queſtion?

A queſtion is a ſpeech whereof ſome doubt is made and vttered with ſome interrogatorie: as, How, What, or Whether: and ſuch queſtion is either ſimple, or compound.

Which call you ſimple, and which compound?

It is called ſimple, when the queſtion conſiſteth onely of one word; as when I aske what Iuſtice is, or what Fortitude is, and ſuch like; and is to be diſcuſſed by defining and diuiding the ſame. It is called compound, when it conſiſteth of many words ioined together by rules of Grammar, to make ſome perfect ſentence; as when I aske whether it be lawfull for the Chriſtians to make warre vpon the Turkes, or not: and ſuch like queſtions, which are to be diſcuſſed by arguing and reaſoning on both ſides: for Definition, Diuiſion, and Argumentation, as I ſaid before, are the three eſpeciall inſtruments whereby Logicke findeth out the truth in any doubtfull matter.

Of

Of what parts doth a compound queſtion conſiſt?

Of two, that is, the ſubiect and the predicate.

What meane you by theſe words, ſubiect and predicate?

The ſubiect is the word or ſentence, whereof another word or ſentence, called the predicate, is ſpoken: as when I ſay, Man is a ſenſible body; here this word Man is the ſubiect, and ſenſible body is the predicate: or each of them may contain many words, as this, To be learned in the Law requireth a long ſtudie; here To be learned in the Law is the ſubiect, and all the reſt is the predicate.

How ſhall I know in long ſpeeches, and ſpecially being prepoſterouſly ſet, which is the Subiect, and which is the predicate?

By asking this queſtion, Who, or What: for that which anſwereth to this queſtion, is alwaies the Subiect, as in this example: It were meet to learne my Grammar perfectly, before I entred into my Logicke: here if you aske, What is meet, you ſhall finde that to learne my Grammar perfectly is the Subiect, and all the reſt to be the predicate. And note that theſe two words, Subiect and Predicate, are ſaid to be the terms, limits, or extreme bounds of a Propoſition, whereof we ſhall ſpeake hereafter.

Sith euery queſtion doth conſiſt of words, me thinks it were neceſſary to ſhew how words are diuided.

Of words the Schoolemen make diuers and manifold diuiſions, of which I minde here to recite but three onely, whereof the firſt is this: Of words ſome be ſimple, which they call *Incomplexa*; and ſome be compound, which they call *Complexa*. Simple or ſingle words, are ſuch as are ſole or ſeuered one from another, not making any ſentence, as man, horſe, wolfe. The compound are words ioined orderly together by rules of Grammar, to make ſome perfect ſentence, as, Man is a ſenſible body. And hereof the queſtions are ſaid to be either ſimple or compound, as hath been ſaid before.

What is the ſecond diuiſion of words?

Of words ſome, be of the firſt Intention, and ſome of the ſecond.

Which are they?

Words of the firſt Intention are thoſe, whereby any thing is

ſignified or named by the purpoſe and meaning of the firſt author or inuentor thereof, in any ſpeech or language whatſoeuer it be: as the beaſt whereon we commonly ride, is called in Engliſh a *Horſe*, in Latine *Equus*, in Italian *Cauallo*, in French *Cheual*. Words of the ſecond Intention are termes of Art, as a Noune, Pronoune, Verbe, or Participle, are termes of Grammar: likewiſe *Genus*, *Species*, *Proprium*, and ſuch like, are termes of Logicke.

What is the third diuiſion of words?

Of words, ſome be called *Indiuidua*, that is to ſay, particular, or rather ſingular; and ſome be called *Vniuerſalia*, that is to ſay, vniuerſall, common or generall.

CHAP. III.

Of ſingular and moſt particular words, called Indiuidua.

What is Indiuiduum?

Indiuiduum is that which ſignifieth but one thing only, and can be applied but to one thing only; as this name, *Iohn*, or *Robert*, ſignifieth but one certaine man, and not many.

How many kindes of Indiuiduums be there?

Foure, that is, *Indiuiduum determinatum*, *Indiuiduum demonſtratiuum*, *Indiuiduum vagum*, and *Indiuiduum ex hypotheſi*.

What is Indiuiduum determinatum?

Indiuiduum determinatum, that is to ſay, certaine or determined, is the proper name of ſome one certaine thing, whatſoeuer it be, as *Iohn* or *Thomas* is the proper name of ſome or one man: againe, *Bucephalus* is the proper name of great *Alexander* his horſe: and *London* is the proper name of the chiefeſt Citie in *England*.

What is Indiuiduum demonſtratiuum?

Indiuiduum demonſtratiuum, which is as much to ſay, as ſhewing or pointing, is a common word or name ioined with a Pronoune demonſtratiue, to ſignifie ſome one certaine thing onely, as when we ſay, this man, or that horſe: and *Indiuiduums* demonſtratiue be more ready to ſignifie particular things, as well in acci-

dents,

dents as in ſubſtances, then are *Individua determinata*: for This, or That, and ſuch like Pronounes, doe point out a thing, as it were with the finger, when proper names oftentimes doe faile: yea the Pronoune demonſtratiue is of ſuch force, as being ioined to the moſt generall word that is, maketh it *Individuum*, as well as when it is ioined to the moſt eſpeciall: for, this ſubſtance or this body is *Individuum*, as well as this man or that horſe.

What is Individuum vagum?

Individuum vagum, that is to ſay, wandering or vncertaine, is a word betokening ſome one certaine thing, but not certainly: as when I ſay, There was a certaine man here to ſeeke you; by this ſpeech is meant but one man, and yet vncertaine who it was: and therefore, to make the thing more certaine, wee vſe to adde ſome token or marke; as wee reade in the Acts of the Apoſtles, *There was a certaine man which was halt and lame from his mothers wombe, whom they laid daily before the gate of the Temple, &c.* And note, that like as we doe vſe *individua*, *demonſtratiua*, & *determinata*, in declaring things either preſent, or certainly knowne: ſo in ſpeaking of things abſent, or vncertainly knowne, wee expreſſe our mindes oftentimes by *individua vaga*.

What is Individuum ex hypotheſi?

Individuum ex hypotheſi, that is to ſay, by ſuppoſition, is a word which of his owne naturall ſignification being common and vniuerſall is made notwithſtanding by ſuppoſition a ſingular word, and to ſignifie but one thing onely: as for example, this word, *The Sonne of Marie*, is a common terme, and yet by ſuppoſition is made to ſignifie none but *Chriſt* only: likewiſe when we ſay, *The Greeke Poet*, we meane none but *Homer*.

CHAP. IV.

Of words vniuerſall or generall.

What words are ſaid to be vniuerſall or generall?

Thoſe words are ſaid to be vniuerſall, which are ſpoken of many things, that is to ſay, which may be applied to many things, or comprehend many things, as this word *Animal* (which is as much

much to ſay as a ſenſible body) comprehendeth both man, bruit beaſt, fiſh, fowle, bird, and euery thing elſe that hath feeling and mouing.

How are ſuch words diuided?

Into Predicables and Predicaments.

Of the fiue Predicables.

WHat call you Predicables?

Predicables are certaine degrees, or rather petigrees of words that be of one affinitie, ſhewing which comprehend more, and which comprehend leſſe.

How many ſuch be there?

There be fiue, that is to ſay, *Genus, Species, Differentia, Proprium, & Accidens:* which may be Engliſhed thus, Generall kinde, Speciall kind, Difference, Propertie, and Accident. But we thinke it beſt to begin firſt with *Species*, becauſe it is next to *Indiuiduum.*

Of the ſpeciall kinde, called in Latine Species.

WHat is Species?

Species is a ſpeciall kinde, which is ſpoken of many things, that is to ſay, it comprehendeth many things differing only in number, in asking the queſtion, what the thing is: as when I aske, What is *Iohn?* it is rightly anſwered, to ſay, A man: for this word *man* is an vniuerſall word, comprehending both *Iohn, Thomas, Robert*, and all other ſingular men.

How manifold is Species?

Twofold, that is, *Infima* and *Subalterna. Infima*, that is to ſay, the loweſt or moſt eſpeciall kinde, is that which comprehendeth many things differing only in number, and therefore cannot be a generall kinde, as man, horſe, and ſuch like ſpeciall kindes. *Species ſubalterna*, is that which comprehendeth many things differing in kinde, and in diuers reſpects may be both *genus* and *ſpecies*, as theſe words, *animal* or ſenſible body, bird, fiſh: for this word *bird*, in that it comprehendeth diuers kindes of birds, as a Blackbird, a Mauys, a Goldfinch, and many other kinds of birds, it is a generall kinde: but in reſpect of theſe words, ſubſtance, body, or *animal*, it is but *ſpecies.*

How

How is ſpecies called of the Greekes?

It is called *Idea*, which is as much to ſay, as a common ſhape conceiued in the minde, through ſome knowledge had before of one or two *Indiuiduums* hauing that ſhape: ſo as after wee haue ſeene one wolfe, or two, we beare the ſhape thereof continually in our mindes, and thereby are able to know a wolfe whenſoeuer we finde him, or (if need be) to paint him. But *genus* extendeth too farre, and comprehendeth too many ſpeciall kindes to bee ſo eaſily painted. And note that ſuch ſhapes or *Idea* are ſaid alſo to be perpetuall.

Why are they ſaid to be perpetuall?

Becauſe they continue in the minde, though the things themſelues ceaſe to haue any being: as the ſhape of a Roſe continueth in our mindes in the cold heart of Winter, when there is no Roſe indeed. And this is the true meaning of *Plato* touching *Idea*, that is, to be perpetuall in the minde, not ſeparate from mans intelligence, as ſome men faine: for vniuerſalities are alwaies to bee comprehended in mans mind, but not Indiuidua: which, becauſe they are infinite, there can be had of them no certaine ſcience or knowledge.

Of the generall kinde, called Genus.

WHat is *Genus*?

Genus is a generall kinde which may bee ſpoken of many things differing in ſpeciall kinde, in asking the queſtion, what the thing is: as if I aske, What is man, or horſe? It is rightly anſwered, to ſay, *Animal*: for this word *Animal* comprehendeth both man, horſe, lion, and many other ſpeciall kinds of beaſts.

How is it diuided?

Into two, that is, *Genus* moſt generall, and *Genus* ſubalternate.

What is genus moſt generall?

It is that which in no reſpect can be *ſpecies*, as theſe, Subſtance, Quantitie, Qualitie, and all the reſt of the ten Predicaments, which be the higheſt kindes, comprehending all other kindes, and are comprehended of none.

What is that which you call ſubalternate?

It is that which in diuers reſpects may be both *genus* and *ſpecies*.

cies, as theſe, *animal* or ſenſible body, ſtone, tree, fiſh, bird: which being compared to their ſuperiours, as to ſubſtance or body, be ſpeciall kindes: but if to their inferiours, as this word ſenſible bodie being compared to man or horſe, or this word ſtone to a flint or Diamond, or this word tree to an Apple-tree or Peare-tree, or this word fiſh to a Salmon or Pickerell, or this word bird to a Mauys or Goldfinch, and ſuch like, then they be generall kindes. The order of all which kindes, as well generall as ſubalternate, as alſo moſt eſpeciall, you may ſee here in the Table following, taken out of the predicament of ſubſtance: in which Table, Subſtance is the higheſt or moſt generall kinde, vnder which are placed the leſſe generall or ſpeciall kindes, according as they bee in degrees high or low, nigh or farre from ſubſtance. Moreouer, on each ſide of the generall kindes are ſet downe in this Table the differences whereby the ſaid generall kindes are diuided euery one into thoſe inferiour kindes which it comprehendeth. And the like Table may be made of all the reſt of the Predicaments.

A Table ſhewing the order and degrees of generall kindes and eſpeciall kindes, taken out of the predicament of Subſtance.

Differences,	Generall and ſpeciall kinds	Differences,	Examples.
With bodie,	*Subſtance is either*	*Or without body, as*	*An Angell, A Spirit, The ſoule of a man ſeparated from the bodie.*
Compound of the foure elements, as all naturall bodies and vnnatural	*If with body, it is either*	*Or ſimple, as*	*The 11. heauens, The 4. elements.*

Liuing,

Of Difference, called of the Latines, Differentia.

WHat is difference?

Difference is that whereby things doe differ one from another, or any thing from it selfe.

How many kindes of differences be there?

According to *Porphyrius*, there be three kindes, that is to say, common, proper, and most proper or especiall, called of the Latines, *Differentia specifica.*

What call you a common difference?

A common difference is some separable accident, whereby one thing differeth from another, or from it selfe: as a hot man from a cold, or a man standing from himselfe sitting.

What is proper difference?

A proper difference is ſome inſeparable accident, whereby one thing differeth from another, or from it ſelfe: as the Swanne by whiteneſſe differeth from the Crow, the gray-eied man from another man that hath blacke eies, or from himſelfe, as hauing now an vnmoueable ſcarre in his face, whereas before hee had none.

What is the moſt proper difference?

The moſt proper difference, only receiued and allowed of the Logicians, is that which is ſpoken of many things differing in kinde or number, in asking the queſtion what manner of thing any thing is, as this word reaſonable or vnreaſonable: for if I aske the queſtion, what manner of thing this man or that man is, as *Iohn*, *Thomas*, or *Richard*, &c. it is rightly anſwered, to ſay, A reaſonable body. Likewiſe if I aske what manner of thing a horſe is, it is truly anſwered, to ſay, An vnreaſonable body: for theſe be the moſt proper and eſpecial differences, whereby men and bruit beaſts doe differ one from another.

How manifold is the office of a Logicall difference?

Twofold: the one to diuide the generall kinde into his eſpeciall kindes, and the other to conſtitute or make the ſelfe-ſame ſpeciall kindes. Wherfore ſuch differences are ſaid in diuers reſpects to be ſometimes diuiſiue, and ſometimes conſtitutiue, yea and ſometimes both; as theſe differences, corporate and vncorporate, liuing and vnliuing, ſenſible and vnſenſible, reaſonable and vnreaſonable; which in that they doe diuide ſome generall kinde into other kindes, either more ſpeciall, or not ſo generall, they may be called differences diuiſiue: but in that they conſtitute or make any ſpeciall kinde, as this difference reaſonable being added to a ſenſible body, maketh the ſpeciall kinde, man; ſuch difference may be well called a difference conſtitutiue, or rather ſpecificatiue, as the former Table of generall kindes and differences doth plainly ſhew.

What other diuiſion doe the Schoolemen make of this Logicall difference?

They ſay, that of theſe differences ſome do extend further then ſome, for ſome may be applied to many ſpeciall kinds, as liuing,

and

and vnliuing, ſenſible and vnſenſible, and alſo the difference vnreaſonable, but the difference reaſonable can be applied but to one ſpeciall kinde onely, which is man.

Of Property, called in Latine, Proprium.

What is propertie?

It is a naturall inclination or property incident to one eſpeciall kinde, which is to be vnderſtood foure manner of waies.

Shew how.

Firſt, it is called *Proprium*, which is proper to one onely kind, but not to the whole kind, as to be a Poet or Muſitian, is proper to man, but not to euery man: Secondly, it is called proper that belongeth to al the kind, but not to that kind alone: as to be two-footed, belongeth to al mankind, but not to that kind alone: for al flying foules are alſo two footed: Thirdly, it is ſaid to be proper, when it belongeth to one only kind and to all that kind, but yet not alwaies: as to be hore-headed or bald, is proper to man in old age, but yet not alwaies: Fourthly, it is ſaid to be proper, or rather moſt proper, which is incident to one kinde alone, to all that kinde and alwaies, as to haue a naturall aptnes to laugh or to ſpeake is proper to man onely, to euery man, and alwaies, and therefore this kind of property is ſaid to be conuertible, with the kinde whereunto it belongeth, as whatſoeuer hath naturally power to ſpeak or laugh, the ſame is man, and whatſoeuer is man, the ſame hath power to ſpeake or laugh.

Of an accident, called in Latine, Accidens.

What is an accident?

An accident is a voice or word ſignifying things caſuall, cleauing to ſubſtances or ſubiects, without which ſubiects they haue no beeing at all, and it is thus defined. An accident is that which may be abſent or preſent without corruption of the ſubiect whereto it cleaueth, becauſe it is no ſubſtantiall part of the ſubiect, and of ſuch accidents ſome be called ſeparable, and ſome vnſeparable.

What is a ſeparable accident?

A ſeparable accident is that which may bee eaſily ſeparated

from the ſubiect, as outward heat or cold from a mans body, whiteneſſe or blackneſſe from a wall.

What is an vnſeparable accident?

An vnſeparable accident is that which cannot be ſeparated from his ſubiect in deed, but only in thought or imagination, as heat from the fire, heauineſſe from lead. And ſuch accidents bee either incident to certaine ſubiects, or ſubſtances in particular, as ſome men to be gray-eied, or red-headed; or elſe to ſome whole kinde in generall, as to all Rauens to be blacke, and all Swannes to be white.

Of the manifold vſes of the aforeſaid fiue Predicables.

TO how many vſes doe the Predicables ſerue?

To theſe foure neceſſarie vſes: Firſt, they ſhew which words doe comprehend more, or extend furtheſt, and which comprehend leſſe or leaſt, and what affinitie is betwixt word and word, ſo as in making any definition, a man may eaſily perceiue how euery word ought to be expoũded one by another, that is to ſay, the leſſe common by that which is more common; as if you would define a Spaniell, you muſt ſay that he is a dogge: for this word dogge is a more common word then Spaniell, becauſe it comprehendeth both Spaniell, Greyhound, Hound, Curre, Maſtiffe, and euery other kinde of dogge. Secondly, they ſhew the nature of propoſitions, which be neceſſarie, and which be caſuall or accidentall.

Which call you neceſſarie, and which caſuall?

That propoſition is ſaid to be neceſſarie, wherof the predicate is either a generall kinde, a ſpeciall kinde, a ſpeciall difference, or propertie, and is neceſſarily coupled to his ſubiect; as when I ſay, *Iohn* is a ſenſible body, *Iohn* is a man, *Iohn* is reaſonable, *Iohn* is apt to ſpeake.

When is a propoſition ſaid to be accidentall?

When the predicate is an accident, as when I ſay, *Iohn* is learned or vnlearned, white or blacke. Thirdly, they yeeld matter meet to make definitions and diuiſions: for Logicall definitions be made of the nigheſt generall kinds ioined together, with their true differences or properties: as in defining a man, wee ſay that

man

man is a ſenſible body endued with reaſon: and in making diuiſions, we either diuide the generall kindes into their eſpeciall kindes, as a ſenſible body into man and bruit beaſts, or the ſpeciall kindes into their *Individuums*, as man into *Iohn*, *Thomas*, &c. or elſe we diuide ſubiects into their accidents, as of men, ſome be free, and ſome be bound, and ſuch like. Fourthly, they helpe much towards the inuention of arguments: for arguments bee fetched from the common places, as from the generall kinde, the ſpeciall kinde, the difference, the propertie, and from other like places of inuention, as ſhall bee taught hereafter in his proper place. And note, that of theſe predicables doe ſpring certaine predications, whereof we come now to ſpeake.

CHAP. V.

Of Predication, and of the diuers kindes thereof.

What is predication?

Predication is a certaine kinde or phraſe of ſpeech, whereby one word is ſpoken of another, and aptly applied to another, as when we ſay, *Iohn* is a man; for this word man is a generall word, and is ſpoken of *Iohn*, *Thomas*, *Richard*, and euery other ſingular man.

How many kindes of predications be there?

Two, that is, eſſentiall and accidentall.

What is eſſentiall predication?

It is a naturall and vſuall kinde of ſpeech, whereby one thing is naturally and properly ſpoken of another, or as the Logicians ſay, when words ſuperiour are ſpoken of their inferiours being of one ſelfe affinitie, as when the generall kinde is ſpoken of any his ſpeciall kindes, or the ſpeciall kinde of any his *Individuums*, or when the difference or propertie is ſpoken of their ſpeciall kindes, or of any of the *Individuums* comprehended vnder the ſaid ſpeciall kindes; as when we ſay, Man is a ſenſible body, or that *Iohn* is a man, or, *Iohn* is reaſonable, or, *Iohn* is apt to ſpeake, or ſuch like: for ſuch ſpeeches are both naturall and of neceſſitie, becauſe the predicate is aptly applied to his ſubiect. To this

kinde of predication ſome men doe alſo referre two other kindes of ſpeeches.

Which be they?

Predication, Identicall and vnuſuall.

What is Identicall predication?

It is a kinde of ſpeech, whereby one ſelfe thing is ſpoken of it ſelfe, as when we ſay, *Iohn* is *Iohn*; which though it be eſſentiall, yet becauſe nothing is expounded thereby, it is not allowed of the Logicians.

What is vnuſuall predication?

It is a kinde of ſpeech ſeldome vſed, as when wee reade in the holy Scriptures, God is man, The word was made fleſh; for theſe be moſt eſſentiall and neceſſarie ſpeeches, though not vſuall in any other ſcience then in Diuinitie.

What is predication accidentall?

Predication accidentall is when an accident is ſpoken of his ſubiect, as, Wine is ſweet, or, Wine is ſowre, *Socrates* walketh; for this is a caſuall kinde of ſpeech, imploying no neceſſitie, as doe the other eſſentiall or naturall ſpeeches before recited. To this alſo may be referred predications by way of ſimilitude, as when we ſay, One man is a God or Deuill to another, A Tyrant is a Wolfe or Fox, that is to ſay, like a Wolfe or Fox, which are otherwiſe called figuratiue or metaphorical ſpeeches. But whileſt we talke here of accidentall predications, it ſhall not be amiſſe to ſhew you that the Schoolemen, the more diſtinctly to expreſſe the nature of accidents, doe vſe two termes, *Abſtractum* and *Concretum*. *Abſtractum* is the bare ſhape of any ſubiect ſeparated by imagination from the ſame, as the whiteneſſe or blackneſſe of a wall, or any other thing that is either white or blacke, which abſtract cannot be properly ſpoken of his ſubiect; for it were no proper ſpeech, to ſay, that this wall is whiteneſſe: wherefore wee muſt vſe the adiectiue called *Concretum*, ſignifying the ſhape, together with the ſubiect, as when wee ſay, This wall is white.

CHAP.

CHAP. VI.

Of Predicaments.

What are Predicaments?

Predicaments are certaine Titles or Tables containing all things that be in the world: for euery thing, whatsoeuer it be, is either a substance, or accident: and if it be a substance, it is found in the Table of substance hereafter following: if it bee an accident, it belongeth either to quantitie, qualitie, relation, action, passion, time, place, to be seited, or to haue: for these be the Tables of accidents, in one of the which euery accident is easie to be found. So that in all there be ten Predicaments or Tables, one of substance, and nine of accidents, and these be called the highest and most generall kindes, albeit there be others indeed higher then they, called of the Schoolemen, *Transcendentia*, that is to say, surpassing, as these, *Res, ens, vnum, aliquid, verum, bonum:* which may be Englished thus; a thing, a being, one, somewhat, true, good. But forsomuch as these be not spoken of the other higher kindes according to one selfe signification, but may be diuersly applied, they are excluded from the order of predicaments.

What other words are excluded from the order of Predicaments?

All compound words, called of the Schoolemen *Complexa*, as Goodman *Plato* disputeth: and all doubtfull words hauing diuers significations, otherwise called Equiuokes, and also termes of Art, as a Noune, a Pronoune, a Verbe, which be termes of Grammar, and as *genus, species, differentia*, which bee termes of Logicke, and such like: which termes of Art are called of the Schoolemen, names of the second intention, as hath beene said before. Notwithstanding, differences constituting especial kinds, doe belong to the predicament of the same speciall kindes, and the parts of any whole thing doe belong to the predicament wherein the whole is contained: and first, principles doe belong to the predicament or table of those things whereof they bee principles, as a point or pricke belongeth to the predicament of quantitie, all which shall be plainly declared vnto you, immediately.

ately after that we haue ſomewhat talked of thoſe things which the Schoolemen call *Antepredicamenta*, that is to ſay, forepredicaments.

CHAP. VII.

Of Forepredicaments.

WHat meane you by forepredicaments?

Forepredicaments be certaine definitions, diuiſions, and rules taught by *Ariſtotle* before the predicaments, for the better vnderſtanding of the ſame, and therefore are called *Antepredicamenta*, that is to ſay, Fore predicaments.

What, and how many things defineth he?

Three, that is, Equiuokes, Vniuokes, and Denominatiues.

What call you Equiuokes?

Equiuokes be ſuch things as haue one ſelfe name, and yet bee diuers in ſubſtance or definition; as a naturall dogge, and a certaine ſtarre in the firmament, are both called by one name in Latine, *Canis*, yet they be nothing like in ſubſtance, kinde, or nature. And note that the Schoolemen doe call the word or name it ſelfe *Equiuocum Equiuocans*, and the thing ſignified by the word *Equiuocum Equiuocatum*. They make alſo two kindes of Equiuokes, that is, Equiuokes by chance, and Equiuokes of purpoſe. The firſt is, when one ſelfe name is giuen to many things by chance, and not for any likeneſſe that is betwixt them, as in Engliſh this word Hart ſignifieth as well the Hart of a man or beaſt, as a certaine beaſt called a Hart in the Foreſt. The ſecond is, when one ſelfe name is giuen to diuers things of purpoſe, for ſome likeneſſe that is betwixt them, as a painted man is called man as well as the liuing man; for wee will commonly ſay, Here is King *Henry* the Eighth, when indeed it is but his picture. But ye muſt note, that all Equiuokes being generally pronounced without addition, ought to be vnderſtood according to their chiefe and moſt principall ſignification, as this word man being generally ſpoken, ought to be taken for a liuing man, and not for a painted man: but no Equiuokes ought to bee placed in any predicament, neither can it be defined, vnleſſe it bee firſt brought

brought to one certaine ſignification; and therefore all Equiuokes are vtterly barred from all manner of Diſcipline.

What call you Vniuokes?

Vniuokes bee thoſe things that haue one common name, which is ſpoken of them eſſentially, or really, as a man, a horſe, a lion, whoſe common name is *animal*, or ſenſible body; for in asking what either of them is, it is rightly anſwered, to ſay, *animal*. And I ſay here really, becauſe it is not enough for Vniuokes to haue a common name, vnleſſe the ſame be alſo reall or eſſentiall, whereby are excluded all common names or vnderſtandings that be accidentall: for though white or blacke, ſwift or ſlow, or ſuch like, is a common name, and is commonly applied both to man and beaſt, yet that is accidentally, and not really or ſubſtantially. Moreouer, the Schoolemen doe call the common word it ſelfe *Vniuocum Vniuocans*, and the thing ſignified by the word *Vniuocum Vniuocatum*.

What call you Denominatiues?

Denominatiues are thoſe accidents that be of like name, and differ only in caſe, or finall termination; as humble, humilitie; proud, proudneſſe: for of humilitie, a man is ſaid to be humble; and of pride, to be proud: and according to the Schoolemen, that word whereof the name doth ſpring, is called *Denominator*, and the name it ſelfe *Denominatiue*, and the thing or perſon ſo called, the *Denominated*; as if I ſhould ſay of valiantneſſe, *Peter* is ſaid to be valiant; here valiantneſſe is the Denominator, valiant the Denominatiue, and *Peter* the Denominated: for *Peter* is the ſubiect whereunto the Denominator doth cleaue. The Grammarians doe call the Denominator *Abſtractum*, that is, a ſubſtantiue, and the Denominatiue *Concretum*, that is, an Adiectiue.

To what end doth Ariſtotle chiefly vſe theſe definitions?

To ſhew the differences of predications or kindes of ſpeeches, which are to be allowed, and which not: againe, to know which be predications eſſentiall, and which be accidentall: for according to the three definitions before rehearſed, there bee three Predications, that is to ſay, Predication Equiuocall, Vniuocall, and Denominatiue.

What is Predication Equiuocall?

Predication Equiuocall, is when the equiuoke is ſpoken of any of the things that it ſignifieth, as to ſay, His Letter was a Letter of the matter, meaning perhaps a hinderer of the matter: but ſuch kinde of ſpeeches ought to be reiected from all good diſcipline, as hath beene ſaid before.

What is Predication Vniuocall?

It is when the generall kinde is ſpoken of his eſpeciall kindes, or the eſpeciall kinde of her inferiours, or the ſpeciall difference of that ſpeciall kinde which it maketh, or of the Indiuiduums contained vnder the ſame ſpeciall kinde, as when wee ſay, Man is a ſenſible body, Man hath reaſon, or, *Iohn* is a man.

What is Predication Denominatiue?

It is when ſome accident is ſpoken of his ſubiect, as when wee ſay, *Peter* is proud, humble, or valiant.

What, and how many diuiſions be there?

Two: The firſt diuiſion is touching words ſimple and compound, whereof though wee haue ſaid ſomewhat before, yet it ſhall not grieue vs, here againe to ſet it downe in ſuch order as the Logicians vſe.

Shew how.

Of words, ſome be ſimple, called in Latine, *Incomplexa*, and ſome be compound, called *Complexa*. Simple words bee diſtinct and ſeuerall words, not ſet together by any rule of Grammar, to make any perfect ſentence, as, good, iuſt, a man, a horſe, to ſtand, to goe. Compound words be words ſignificatiue, which are ioined together by rules of Grammar to make ſome perfect ſentence, as, *Iohn* is learned.

What is the ſecond diuiſion?

The ſecond diuiſion is fourefold, as followeth: Firſt, of things that be, ſome be ſpoken of a ſubiect, and yet be in no ſubiect, as, man, horſe, and ſuch like vniuerſall natures or ſubſtances: for they be no accidents. Secondly, ſome be in a ſubiect, and yet be not ſpoken of any ſubiect, as all particular accidents, as this or that colour, for theſe be Indiuiduums, and therefore not predicable. Thirdly, ſome be in a ſubiect, and alſo be ſpoken of a ſubiect, as all vniuerſall accidents, as Science, Grammar, Logike, and ſuch like: for of theſe ſome be generall, and ſome be ſpeciall kindes,

kindes, and therfore are ſaid to be predicable accidents. Fourthly, ſome be neither in a ſubiect, nor ſpoken of a ſubiect, as *Iohn, Thomas*, this man, or that man, this horſe, or that horſe; for theſe be firſt natures or ſubſtances, and therefore are ſubiects themſelues not predicable.

Whereto ſerueth this diuiſion?

By this diuiſion ye may learne the diuerſitie of theſe two ſpeeches, to be ſpoken of a ſubiect, and to be in a ſubiect: for to be ſpoken of a ſubiect, is to be ſpoken really or eſſentially of ſome thing that is part thereof, as this word *animal*, or ſenſible body, is really ſpoken of man, horſe, and of euery other thing that hath life and feeling; for they bee ſubſtantiall parts of that generall kinde: for if it be demanded what a man or horſe is, it is rightly anſwered, that he is a ſenſible body. But to bee in a ſubiect, is to be ſpoken of another thing accidentally, and not eſſentially, as this word white or blacke is ſpoken accidentally of man, or of any other ſubiect, and not eſſentially; for neither is man any eſſentiall part of white, nor white any eſſentiall part of man, and therefore cannot be in man, or in any other ſubiect, but accidentally: and for that cauſe it is ſpoken of his ſubiect accidentally, and not really.

Now tell how many, and what theſe rules bee, whereof you ſpake before.

There be two rules. The firſt is thus: When one thing is ſpoken of another eſſentially, as of his ſubiect, then whatſoeuer may be ſpoken of that predicate, muſt needs bee alſo really ſpoken of the ſame ſubiect: for as this word ſenſible body is ſpoken of man or horſe eſſentially, as when we ſay that man is a ſenſible body; ſo this word liuing body, being ſpoken eſſentially of a ſenſible body, as when we ſay that euery ſenſible body is a liuing body, is alſo as really ſpoken of the foreſaid ſubiect, man, in ſaying that man is a liuing body; for this word, liuing body, is a more generall kinde then ſenſible body is.

What is the ſecond rule?

The ſecond rule is thus: Diuers generall kindes not contained one of another, nor both of a third, haue diuers ſpeciall differences, which doe make diuers ſpeciall kindes, as a ſenſible body and

ſcience : for the ſpeciall differences of a ſenſible body are theſe, reaſonable and vnreaſonable, making both man and bruit beaſt: but the differences of ſcience be theſe, contemplatiue and diſputatiue, and ſuch like, whereby are made ſpeciall kindes of knowledge : for the difference contemplatiue maketh naturall Philoſophie, and the difference diſputatiue maketh Logicke.

To what end ſerue theſe rules?

To the end it might be eaſily knowne what words are of affinitie, and which be of one ſelfe predicament, and which not. Thus farre as touching forepredicaments. Now to the predicaments themſelues. And firſt we will ſpeake of ſubſtance.

CHAP. VIII.

Of Subſtance.

WHat is ſubſtance? and how many kindes of ſubſtances be there?

Subſtance is a thing conſiſting of it ſelfe, and needeth no helpe to ſuſtaine the being thereof: and yet it is clad with accidents ; for otherwiſe we could not diſcerne with our outward ſenſes, whether it were a ſubſtance, or not : for we cannot ſee the ſubſtance of any thing with our bodily eies, but only with the eies of our minde and vnderſtanding ; but we may ſee the ſhape, the quantitie, the colour, and ſuch like accidents cleauing to the ſubſtance, without the which thoſe accidents haue no being at all : and therefore in ſeeing ſuch accidents, we may aſſure our ſelues that there is a ſubſtance ſuſtaining thoſe accidents, which doth alwaies remaine, though the accidents doe faile or change neuer ſo often. As for example : Wee ſee in water, that though it be ſometime hot, and ſometime cold, now of one colour, and now of another, yet the ſubſtance of water doth ſtill remaine, ſo as we may perceiue thoſe accidents to be one thing, and the ſubſtance of water to be another. Now as touching the kindes of ſubſtance, according to *Ariſtotle*, there be two, that is, firſt and ſecond.

What call you firſt ſubſtances?

Firſt ſubſtances be thoſe ſubſtances which the Logicians call *Individua*,

Indinidua, as *Iohn*, *Thomas*, this man, or that man, this horſe, or that horſe, and by reaſon of their accidents are to bee diſcerned with outward ſenſes.

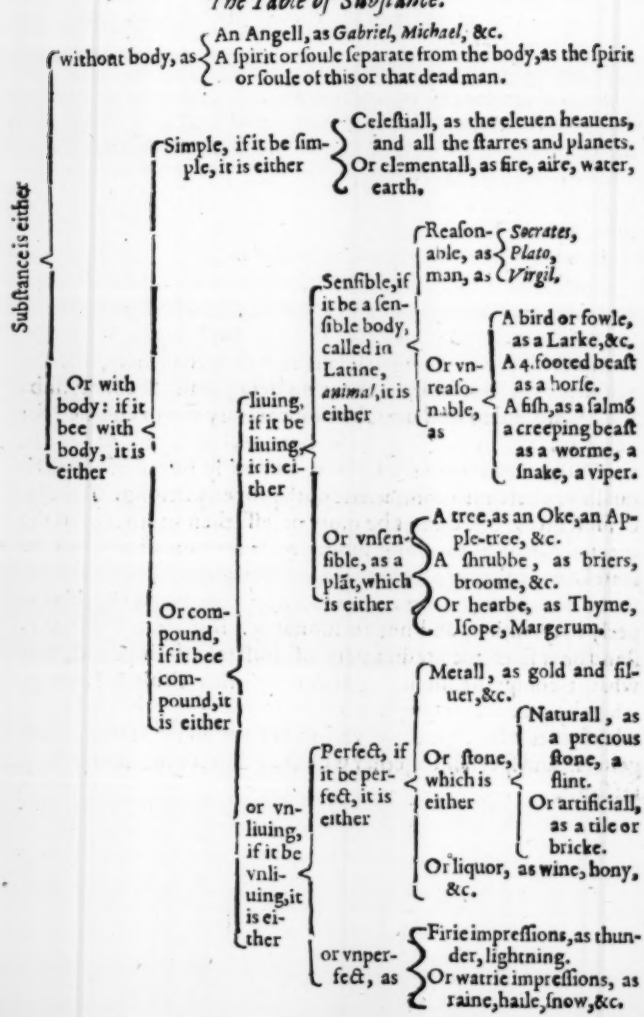
Which call you ſecond ſubſtances?

Second ſubſtances are thoſe which they call ſpeciall kindes, and generall kindes, as man, a ſenſible body, a liuing body, and ſuch like, which are to be comprehended only by mans reaſon, and be not ſubiect to our outward ſenſes, as firſt ſubſtances bee. And theſe ſecond ſubſtances are otherwiſe called of the Schoolemen, vniuerſall natures.

How many properties doe belong to ſubſtance?

Theſe three: Firſt, ſubſtance is contained in no ſubiect, as an accident is: for though the parts of a mans body be contained in the whole, yet euery ſuch part is a peculiar body or ſubſtance, and hath his proper being of it ſelfe ſo well as the whole, whereas accidents without ſubſtance haue no being at all. Secondly, ſubſtances are ſaid to be diuers, but not contrary one to another: for neither is fire, as touching his ſubſtance, contrary to water, nor the Wolfe contrary to the Lambe, but onely in reſpect of their qualitie, whereunto contrarietie doth properly belong. Thirdly, of ſubſtances, one cannot be more or leſſe then another; for the greateſt Giant, as touching ſubſtance, is no more a man then the leaſt Dwarfe that is; neither is a man full growne, more a man, then a childe newly borne: for more or leſſe appertaineth properly to quantitie, and not to ſubſtance. But if you will vnderſtand how farre the predicament of ſubſtance doth extend, and what it comprehendeth, conſider well this Table following, whereby you may learne how to define any kinde of ſubſtance, whatſoeuer it be: for there you ſhall finde all the kindes, both generall and ſpeciall, together with their differences, moſt plainly ſet forth.

The Table of Substance.



CHAP. IX.

Of Quantitie.

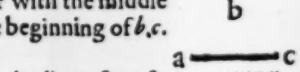
What is quantitie, and how is it diuided?

WHat is quantitie, and how is it diuided?

Quantitie is that which comprehendeth the greatneſſe and number or multitude of things, and is diuided into two kindes, that is, whole and broken.

What is whole quantitie?

Whole quantitie, called in Latine, *quantitas continua*, is that whoſe parts are ioined together with ſome common bound or limit, which is the ending of one part, and the beginning of another, as the parts of the line here ſet downe in the margent, marked with the letters *a. c.* are coupled together with the middle point *b.* which point is the ending of *a, b.* and the beginning of *b, c.*



How many kindes of whole quantitie be there?

Of whole quantitie there be three kindes, that is, *linea, ſuperficies*, and *corpus*.

Shew how they are defined and diuided.

Linea (in Engliſh, a line) is a length without either bredth or thickneſſe, which is either right, or crooked; right, as a yard, an ell, or pole; crooked, as a hoope, or circle.

Superficies (which wee may properly interprete to be the vpper face of any thing) is a length and bredth without depth or thickneſſe; and that is either plaine, or bowing; plaine, as a plaine or ſmooth floore; bowing or compaſſing, as a vault or ouen, whereof the outward ſide is called conuex, and the inward ſide concaue or hollow.

Corpus (which is as much to ſay as a body) is that which hath both length, bredth, and depth, and that is either round, or with angles; round, as a bowle or ball; with angles or corners, as a ſquare die, or ſuch like thing. All which three kindes of quantitie are to be conſidered onely with the minde mathematically, as things abſtract, and ſeparated from all kinde of matter, that is to ſay, as things that haue no being at all, but imaginatiuely, and yet ſo neceſſarily inuented by man, as nothing can be meaſured with-

out

out them. To theſe three kindes of whole quantitie may be alſo added two other kindes, that is to ſay, mouing, and time, being taken for the meaſure, ſpace, or diſtance of place or time wherein any thing is moued.

How many kindes of this mouing be there, and which be they?

Of this mouing there be three kindes, that is, right, circular, and mixt. The right belongeth to the foure elements, and to bodies without life: for their natuall mouing is either right vpward, or elſe right downeward, as the fire, whoſe proper mouing is alwaies to aſcend right vp, and the mouing of a ſtone, or ſuch like heauie thing, is to fall right downeward: for (according to the rules of philoſophie) all light things doe moue vpward, and all heauie things downeward. Circular, or round mouing, belongeth to the heauens, and celeſtiall bodies, which doe turne round like a Cart wheele. The mixt mouing (that is to ſay, partly right, and partly round) belongeth to all liuing beaſts, that goe ſometime forward, ſometime backward, or ſidelong, ſometime vpward, and ſometime downeward.

How is time diuided?

Time is diuided into three kindes, that is, into time paſt, time preſent, and time to come: and vnder time are comprehended yeares, moneths, weekes, daies, houres, and all other words ſignifying diſtance or difference of time.

What is broken quantitie?

Broken quantitie, called of the Latines, *quantitas diſcreta*, is that, whoſe parts are not ioined with any common bound or limit, but be looſe and ſeuerall one from another; which quantitie is diuided into two kindes, that is, number and ſpeech.

What is number, and how is it diuided?

Number is a multitude or ſumme of vnities or ones gathered together: and ſuch number is either ſimple, reſpectiue, or figuratiue: Simple, as, two, three, foure, fiue, &c. Reſpectiue, as halfe, double, treble, quadruble, and ſuch like: Figuratiue, as a three-ſquare or foure-ſquare number, like to theſe here figured ∴ :: and ſuch like.

What things are comprehended vnder broken quantitie?

All names of meaſures, whereby we meaſure any thing, either drie

drie or liquid, as gallon, quart, pint, bushell, pecke, pound, dram, scruple, graine, &c.

How is speech here taken?

Speech is taken here for the measure or quantitie of syllables, whereof some be long, and some be short: and such quantitie is to be considered either in harmonie, in rythme, or verse; of which things, the generall and speciall kindes, together with the rest that haue beene said touching quantitie, are orderly set forth in the Table of quantitie here following.

What, and how many properties doe belong to quantitie?

To quantitie belong three properties: First, to haue no contrarietie; for great and small be not of themselues contrarie, but only by way of comparison. Secondly, to be greater or lesser, but not more or lesse, spoken aduerbially; for a little quantitie is a quantitie as well as the greatest quantitie of all. The third and chiefest propertie of quantitie, is, to be equall or vnequall.

The Table of Quantitie.

CHAP.

CHAP. X.

Of Qualitie.

What is qualitie?

Qualitie is an affection, ſhape, or forme of the minde or bodie, wherof the thing ſo affected or formed taketh his name: as of wiſdome a man is ſaid to be wiſe, and of iuſtice hee is called iuſt.

How many kindes of qualitie be there?

Of qualitie there be foure kindes, that is, habit and diſpoſition, naturall power and impotencie, paſſion and paſſible qualitie, figure and forme.

What is habit, and how is it diuided?

Habit is a conſtant and abſolute perfection in any thing, not giuen by nature, but gotten by long vſe and exerciſe; and it is twofold, that is, of the minde, and of the body: againe, habit of the minde is twofold, whereof the one is called intellectuall, belonging to the reaſon and vnderſtanding of man, and the other morall, belonging to the will of man. Of intellectuall habits, according to *Ariſtotle*, there be fiue, that is, Intelligence, Science, Prudence, Art, and Sapience.

1 Intelligence is the knowledge of ſpeculatiue principles, as 2. and 2. make 4. the whole is more then his part; take equall from equall, and equall remaine, and ſuch like.

2 Science is the knowledge of true concluſions, conſiſting of moſt certaine and infallible propoſitions; as, Man is a ſenſible body, Man is apt to learne: and vnder Science are comprehended the ſciences rationall, as Grammar, Rhetoricke, and Logicke; alſo the ſciences Mathematicall, as Arithmeticke, Geometrie, Muſicke, and Aſtronomie, which are otherwiſe called Quadriuials, that is to ſay, the foure waies or kindes of mathematicall diſcipline; and finally, the ſcience phyſicall, that is to ſay, naturall, as the naturall philoſophie of *Ariſtotle*, or of any other Writer treating of the ſecrets of nature.

3 Prudence is an habit working with true iudgement, and according to right reaſon in all things appertaining to man, bee they good or euill. Prudence may be diuided into prudence monaſticall,

naſticall, domeſticall, and politicall. Monaſticall teacheth to gouerne one ſole perſon: domeſticall, to gouerne a houſhold or familie; and politicall, to gouerne a common-wealth.

4 Art is an habit of knowledge conſiſting of aſſured and certaine rules, tried and approued by experience, and learned by exerciſe, teaching to doe or to make ſomething that is profitable to mans behoofe: and Art compreh endeth all Arts, both liberall and mechanicall, that is to ſay, handie craſts. 5. Sapience, conſiſting both of intelligence, and of ſcience, is the head and chiefe of thoſe knowledges that be moſt honourable in nature, comprehending two notable Sciences, that is, the Chriſtian Diuinitie, and the Philoſophers Diuinitie, otherwiſe called Metaphyſicall, that is, ſupernaturall. And all theſe intellectuall habits are contained vnder a certaine and moſt ſure knowledge, which is alwaies true: for vncertaine knowledge is ſometimes true, and ſometimes falſe: whereto belongeth opinion, ſuſpition, coniecture, and ſuch like. Thus much of habit intellectuall.

What is morall habit, and how is it diuided?

It is a qualitie of the minde, gotten by cuſtome and doctrine, teaching and inuiting mans will to worke, either well or euill; and is twofold, that is, either good, or euill: to the good belong all kinde of vertues, as iuſtice, liberalitie, fortitude, temperance, &c. to the euill al kinde of vices, as pride, couetouſneſſe, cowardlineſſe, and ſuch like. And note, that of vertues, ſome bee called morall, and ſome theologicall, that is to ſay, diuine.

Which call you theologicall or diuine?

Thoſe that be not gotten by cuſtome, or mans induſtrie, but are the meere gifts of God, as faith, hope, and perfect charitie, and all other gifts of the holy Ghoſt, as the gifts of the tongues, of prophecying, of healing, and ſuch like: which ſome doe attribute to habit infuſed, making a difference betwixt habit infuſed, & habit acquired or gotte, as you may ſee in the Table following.

What is habit of the bodie?

Habit of the body is a certaine aptneſſe & agilitie of doing any thing with the body, not giuen by nature, but gotten by cuſtome & exerciſe, as to ride well, to run, to leape, to daunce, to wreſtle, to ſhoot, to fence, to dart, to ſwim, to write, to paint, and ſuch like.

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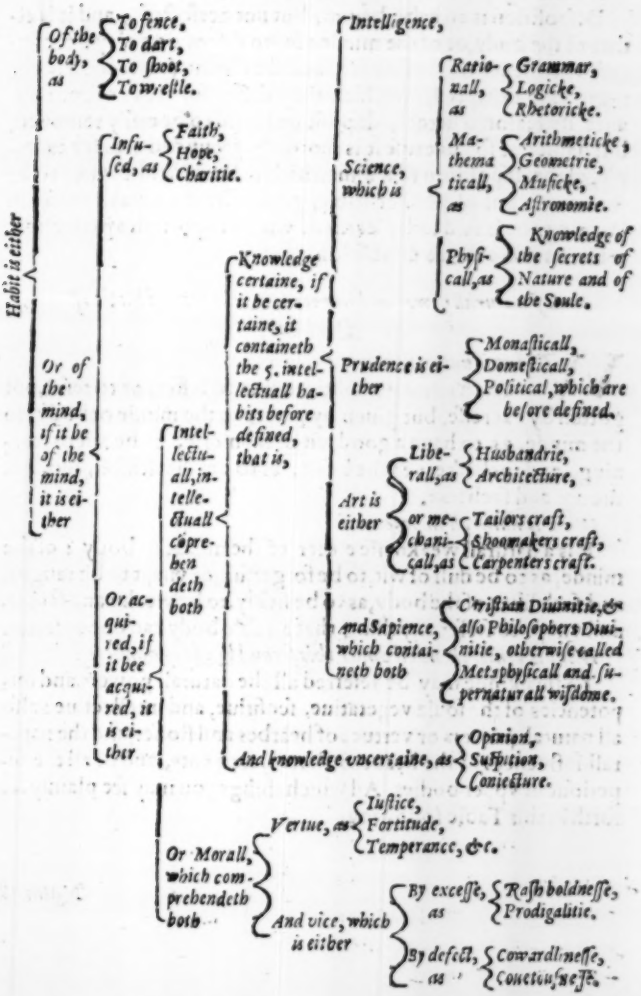
The Table of Habit.



What is diſpoſition, and how is it diuided?

Diſpoſition is an habit begun, but not perfected: and it is either of the body, or of the minde: for to diſpoſition may be referred whatſoeuer was before attributed to habit (perfection in the thing only excepted) in which they differ for lacke of continuance, by reaſon whereof, diſpoſition is ſaid to be eaſily remoued, but habit not ſo, becauſe it is thorowly grounded: as for example, of the diſpoſition that a man hath to learning, he is ſaid to be ſtudious: but of perfect habit, gotten by continuall ſtudie in learning, he is ſaid to be learned, which importeth a perfection, which is more then a diſpoſition.

Of naturall power and impotencie, the ſecond kinde of Qualitie.

What is naturall power?

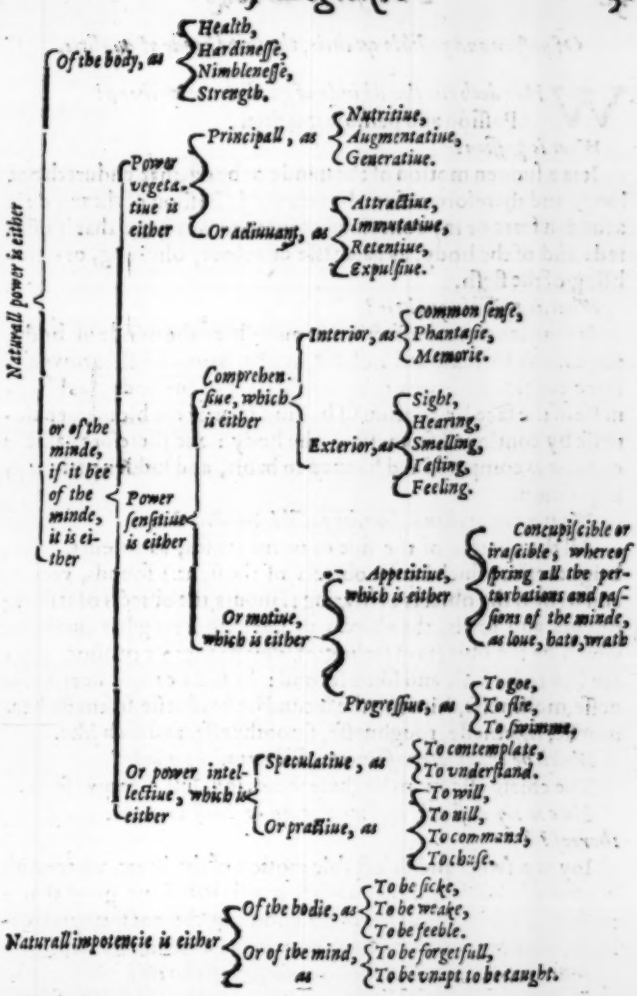
It is a naturall abilitie to doe, to ſuffer, or to reſiſt, not gotten by exerciſe, but giuen by nature to the minde or body: to the minde, as to haue a good wit or memorie, to be apt to learning, and ſuch like: to the body, as to bee healthfull, nimble, ſtrong, and ſuch like.

What is naturall impotencie?

It is a naturall weakneſſe either of the minde or body: of the minde, as to be dull of wit, to be forgetfull, or vnapt to be taught, and ſuch like: of the body, as to be ſickly, to be weake and feeble, and vnapt to ſuffer any thing that an able body can doe or ſuffer.

What is comprehended vnder this ſecond kinde of qualitie?

To this kinde may be referred all the naturall powers and impotencies of the ſoule vegetatiue, ſenſitiue, and intellectiue: alſo all naturall powers or vertues of hearbes and ſtones, and the naturall influences of the heauens, ſtarres, elements, and of all the ſuperiour or vpper bodies. All which things you may ſee plainly ſet forth in this Table following.


Naturall power is either
Of the body, as
Health,
Hardineſſe,
Nimbleneſſe,
Strength.
or of the minde, if it bee of the minde, it is either
Power vegetatiue is either
Principall, as
Nutritiue,
Augmentatiue,
Generatiue.
Or adiuuant, as
Attractiue,
Immutatiue,
Retentiue,
Expulſiue.
Power ſenſitiue is either
Comprehenſiue, which is either
Interior, as
Common ſenſe,
Phantaſie,
Memorie.
Exterior, as
Sight,
Hearing,
Smelling,
Taſting,
Feeling.
Or motiue, which is either
Appetitiue, which is either
Concupiſcible or iraſcible, whereof ſpring all the perturbations and paſſions of the minde, as loue, hate, wrath
Progreſſiue, as
To goe,
To flie,
To ſwimme,
Or power intellectiue, which is either
Speculatiue, as
To contemplate,
To vnderſtand.
Or practiue, as
To will,
To nill,
To command,
To chuſe.
Naturall impotencie is either
Of the bodie, as
To be ſicke,
To be weake,
To be feeble.
Or of the mind, as
To be forgetfull,
To be vnapt to be taught.

Of

Of passion and passible qualitie, the third kinde of qualitie.

WHat doth the third kinde of qualitie comprehend?
Passion and passible qualitie.

What is passion?

It is a sudden motion of the minde or body, that endureth not long, and therefore easie to be remoued. Passion of the minde is a sudden feare or ioy conceiued of some euill or good that is offered: and of the body, as paleneſſe of colour, bluſhing, or trembling of the fleſh.

What is passible qualitie?

It is an inueterate affection or motion of the minde or body, not easie to be remoued: of the minde, as madneſſe growne of some continuall sorrow or melancholie: of the body, as blackneſſe of the face by continuall boiling heat of the bloud, or paleneſſe by continuall ſickneſſe of the body: and therefore passible qualitie is compared and likened to habit, and sudden passion to diſpoſition.

What is comprehended vnder passible qualitie?

All the obiects of the fiue outward senſes, as colours, light, brightneſſe, which be the obiects of the sight; sounds, voices, and noiſes, the obiects of hearing; sauours, the obiects of tasting; odours and smels, the obiects of smelling; tangible qualities, which be the obiects of feeling: of which tangible qualities some are said to be first, and some second: the first be theſe, heat, coldneſſe, moiſtneſſe, drineſſe: the second be hardneſſe, ſoftneſſe, heauineſſe, lightneſſe, roughneſſe, smoothneſſe, and such like.

Which be the chiefe passions or affections of the minde?

The chiefe affections be theſe foure, ioy, luſt, sorrow, feare.

How is ioy defined, and what good or euill branches doe ſpring thereof?

Ioy is a sweet and delectable motion of the heart, wherewith it is ſtirred and delighted, whileſt it enioieth some good that is preſent, or (at the least) seemeth good: and hereof ſpringeth delight, boaſting, maleuolence, reioicing at other mens euill.

What is luſt, and what affections doe ſpring thereof?

Luſt is a motion of the minde, ſtirred vp by thinking of some good

good indeed, or ſeeming good, that is abſent, whereof doe ſpring theſe affections, hope, deſire, loue, anger, wrath and hatred.

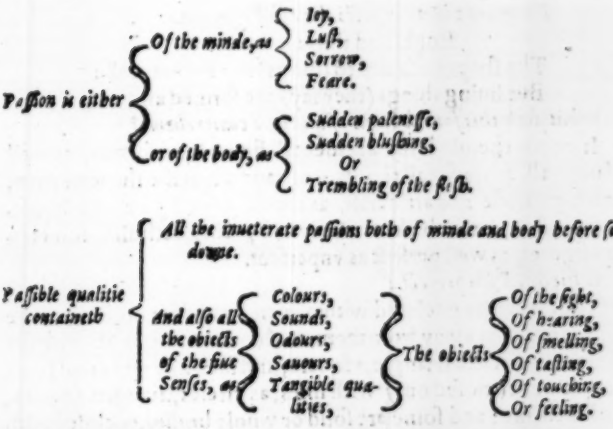
What is ſorrow, and what affections doe ariſe thereof?

It is a greeuous motion of the heart, cauſing it to ſhrinke together, whileſt it flieth ſome preſent euill, that is euill indeed, or ſeemeth euill: and hereof ſpring theſe affections, enuie, ſlandering, mercie, agonie, lamenting, calamitie, carefulneſſe, griefe and deſperation.

What is feare, and what affections doe riſe thereof?

Feare is a greeuous motion, cauſing the heart to ſhrinke together, whileſt it flieth ſome euill that is to come: and hereof ſpring theſe affections, heauineſſe, ſhame, terrour, ſownding, and ſuch like: all which things you may ſee briefly ſet forth in the Table next following.

The Table of paſſion and paſſible qualitie.



Why are theſe obiects of the ſenſes called paſſible qualities?

Becauſe they make the ſenſes to ſuffer, as the colour of any thing, by ſtriking into the eie, maketh the ſight to ſuffer, and

cauſeth either pleaſure or griefe to the ſight: ſo likewiſe the ſweetneſſe of hony in ſtriking the taſte, delighteth it: and contrariwiſe, the bitterneſſe of gall, or ſuch like thing, endued with a bitter ſauour, offendeth the taſte.

Of figure and forme, the fourth kinde of qualitie.

WHat difference is betwixt figure and forme?

Figure, according to ſome, is that which is encloſed with one bound or limit, or with many, as a circle enuironed with one round line, called the circumference, or as a triangle or foure-ſquare figure, whereof the one is encloſed with three lines, and the other with foure, and ſuch like: but forme is the drawing or deſcribing of the ſaid figure. Againe, according to the opinion of ſome, figure is compared to an image repreſenting ſome liuely thing: and forme is ſaid to be the due proportion and feature of the ſame. Some againe doe attribute figure to things without life, and forme to things that haue life, briefly ſet downe in this verſe following:

Formam viuentis, picti dic eſſe Figuram:

Engliſhed thus:

The ſhapes of painted things they Figures call:
But liuing things (they ſay) are formed all.

What doth this fourth kinde of qualitie comprehend?

It comprehendeth the accidentall figures and formes, as well of naturall, as artificiall things: of naturall, as the ſhape of man, beaſt, or fowle: or artificiall, as the ſhape or figure of a houſe, temple, ſhip, or ſuch like: alſo it comprehendeth all Geometricall figures, as well perfect as vnperfect.

Which call you perfect?

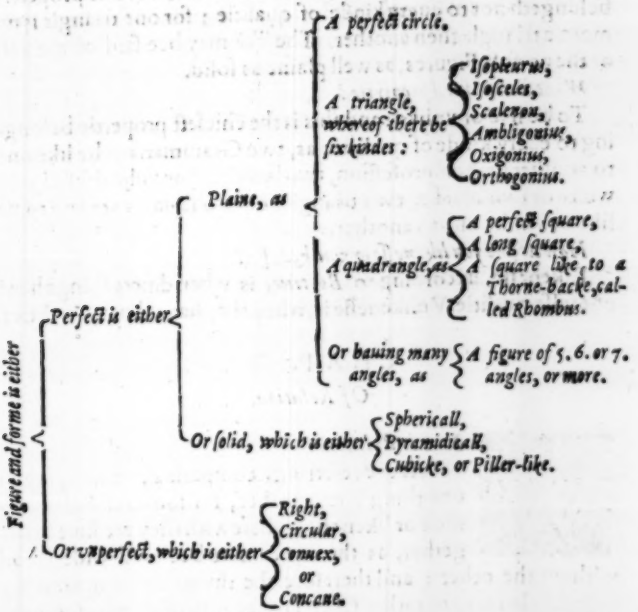
Thoſe that are encloſed within ſuch bounds as nothing can be added or taken away from them, without marring or altering the ſame, as a circle, a triangle, a ſquare, and ſuch like: whereof ſome are plaine, encloſed only with lines, as circles, triangles, ſquares, and ſuch like: and ſome are ſolid or whole bodies, encloſed with vpper faces, either one or many, as round ſpheres, ſharpe pinacles, cubes, as a die, and round pillers.

Which call you vnperfect?

Thoſe

Thoſe which are not ſo encloſed with their bounds, but that ſome one thing may bee added or taken away from the ſame, without changing or altering of the figure, as the rightneſſe, roundneſſe, concauitie, or conuexitie of vnperfect figures, may be lengthned or ſhortned, and yet the former ſhape thereof ſhall ſtill remaine, and not be altered, but only in quantitie.

A Table of figure and forme.



But the true deſcriptions of all the figures contained in this Table, are to be learned of the Geometricians, and not of the Logicians.

Of the properties of qualitie.

How many properties doe belong to Qualitie?

Three: First, to bee contrarie, as vertue is contrarie to vice, heat to cold, white to blacke: yet such contrarietie belongeth not to euery kinde of Qualitie; for Triangles be not contrarie to Squares, nor round pillers to sharpe pinacles.

What is the second propertie?

To be more or lesse: for one man may bee more vertuous, or lesse vertuous; more learned, or lesse learned; more healthfull, or lesse healthfull; more or lesse, hot or cold. Yet this propertie belongeth not to euery kinde of qualitie; for one triangle is no more a triangle then another. The like may bee said of the rest of the perfect Figures, as well plaine as solid.

What is the third propertie?

To be like or vnlike: and this is the chiefest propertie belonging to euery kinde of qualitie: as, two Grammarians be like one to another in their profession, two healthfull or vnhealthfull, two white or two blacke, two triangles or two squares are said to be like or vnlike one to another.

How define you likenesse or vnlikenesse?

Likenesse, according to *Boetius*, is when diuers things haue one selfe qualitie. Vnlikenesse is, when they haue diuers qualities.

CHAP. XI.

Of Relation.

What is Relation?

It is the referring, comparing, or applying of one thing vnto another, for some respect of affinitie or likenesse, wherewith they are knit so together, as the one cannot bee well vnderstood without the other: and therefore the things so compared are called Relatiues, or rather Correlatiues; for of things, some are said to be absolute, and some respectiue or relatiue.

Which call you absolute?

Absolute are those which may be vnderstood by themselues, without

without being applied to any other thing, as ſubſtance, quantitie, qualitie.

Which are ſaid to be relatiue or reſpectiue?

Thoſe that cannot be well vnderſtood of themſelues, without hauing relation to ſome other thing, as the Father and the Sonne, the Lord and the Bondman, the Maſter and the Scholar, &c. Here note, that of the Schoolemen the thing from which the application is made, is called in Latine, *Fundamentum*, in Engliſh, *The foundation*; and the thing whereunto the relation or application is made, is called in Latine, *Terminus*, in Engliſh, the *bound*, *end*, or *terme*, as in theſe Correlatiues, the Father and the Sonne, the Lord and the Bondman, the Schoolemaſter and the Scholar. Here, the Father, the Lord, and Schoolemaſter, are called, euery of them, *Fundamentum*; but the Sonne, the Bondman, and Scholar, euery of them is called, *terminus*, that is, the end or terme; and the application of the one to the other is called relation.

How many kindes of Relatiues be there?

Two: Relatiues *ſecundum eſſe*, that is, indeed, and Relatiues *ſecundum dici*, which we may call, Relatiues in name.

Which call you Relatiues indeed?

Thoſe which according to their principall ſignification haue relation to ſome other thing, without which they cannot be vnderſtood: as a Father is not to be vnderſtood, without there be a Sonne, nor a Sonne, vnleſſe there be a Father. The like may bee ſaid of a Tutor and Pupill, the Maſter and his Scholar, and ſuch like.

What call you Relatiues in name?

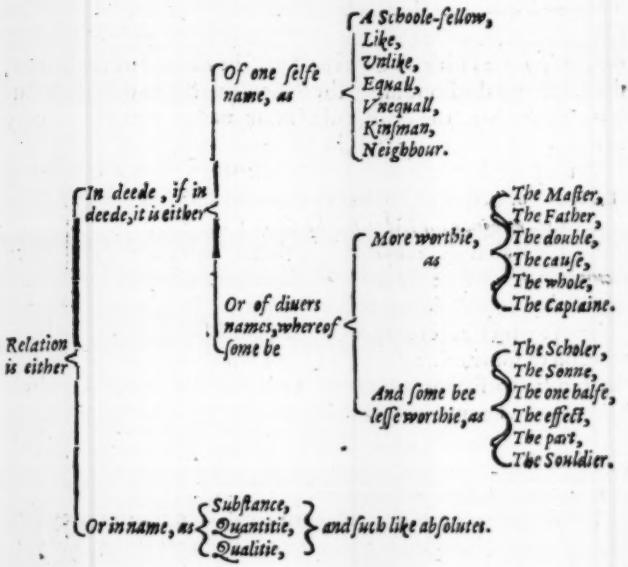
Thoſe that according to their principall ſignification may bee vnderſtood, without hauing relation to any other thing; and yet, becauſe in ſome reſpect they haue relation to ſome other thing, they are called Relatiues, but not properly, for they differ not from the abſolute things before defined, as vertue, vice, habit, diſpoſition &c.

What other diuiſion is there of Relatiues?

Of Relatiues, ſome are ſaid to be of one ſelfe name, and ſome of diuers: of one ſelfe name, as like, vnlike, equall, vnequall, ſchoole-fellow, neighbour, and ſuch like: of diuers names, as the

Father, the Sonne, the Lord and Bondman, &c. And of ſuch, ſome be more worthy, and ſome be leſſe worthy, as the Father is more worthy, the Sonne leſſe worthy; the Maſter more worthy, the Scholer leſſe worthy: which diuiſions this Table doth ſhew.

The Table of Relation.



Of the properties of Relation.

How many properties doe belong to Relation?

Fiue: Firſt, to haue contrarietie, as vertue and viee, ſcience and ignorance. But this propertie belongeth not to all: for double and the one halfe hath no contrarietie, nor the Father and the Sonne.

What

What is the ſecond propertie?

The ſecond is to be more or leſſe, as to bee more like, or leſſe like; or more equall, or leſſe equall. Yet this belongeth not to all: for double hath neither more or leſſe, nor one Father is ſaid to be more or leſſe then another.

What is the third propertie?

The third is, that all Relatiues (which are Relatiues indeed) are conuertible: for he is a Father, that hath a Sonne, and hee is a Sonne, that hath a Father, &c.

What is the fourth propertie?

The fourth is, that one Correlatiue is not before another, but are both together: as the father is called no father, vntill he hath begotten a childe, and a childe is called no ſonne, before he be begotten of the father. For this is a generall rule of Correlatiues: If the one be, the other muſt needs be: If the one be taken away, the other muſt alſo be taken away.

What is the fift propertie?

The fift is, that whoſoeuer aſſuredly knoweth the one Correlatiue, muſt needs know the other: for whoſoeuer certainly knoweth that I am a father, muſt needs alſo certainly know that I haue a childe. The like may be ſaid of all that be Correlatiues indeed, to whom this propertie on'y belongeth, as *Ariſtotle* ſaith.

CHAP. XII.

Of Action.

What is action?

Action is ſome accidentall forme or ſhape, whereby any thing is ſaid to doe or to worke vpon his ſubiect.

What meane you here by this word ſubiect?

The thing that ſuffereth, as the water is the ſubiect whereon the fire induceth the ſhape of heating: for here the water is ſaid to be paſſiue, and the fire actiue.

How is action diuided?

Into actions of the ſoule, and of the body. The actions of the ſoule, are thoſe which the ſoule doth: for, according to his power vegetatiue,

vegetatiue, his actions are to nouriſh, to increaſe, and to engender; and according to his power ſenſitiue, to ſee, to heare, to ſmell, to taſte, to feele; and according to his power intellectiue, to vnderſtand, to will, to nill, and ſuch like.

The actions of the body are thoſe that do immediately belong to ſome body or corporall accident, as to cut, to ſtrike, to heat, to coole, to moiſten, to drie, to make white, to make blacke, and ſuch like.

Is there no other diuiſion of action?

Yes diuers, but ſuch as doe rather belong to naturall Philoſophers, and to Diuines, then to Logicians: and therefore wee leaue to ſpeake any further of them.

What doth this predicament comprehend?

All Nounes and Verbes of the actiue ſignification: as theſe Nounes, generation, corruption, augmentation, diminution, alteration, mouing from place to place, and ſuch like: alſo all Verbes actiue, as, to engender, to corrupt, to increaſe, to diminiſh, to alter or change, and to moue from place to place, and ſuch like Verbes of the actiue ſignification.

How many properties doe belong to action?

Two: Firſt, to admit contrarietie, not ſimply, but *per accidens*, as to kindle, and to extinguiſh: ſecondly, to be more or leſſe, and yet accidentally, as one fire to burne more, and another leſſe, one water to coole more, and another leſſe.

CHAP. XIII.

Of Paſſion.

What is paſſion?

WHat is paſſion?

It is the relation or application of the patient to the agent: as for example, whileſt the water ſuffereth to be heated by the fire, this ſufferance is called paſſion.

What doth this predicament comprehend?

All Verbes of the paſſiue ſignification, as to be engendred, corrupted, increaſed, diminiſhed, or altered, and ſuch like.

What properties doe belong to paſſion?

The ſame that haue beene ſaid before to belong vnto action.

CHAP.

CHAP. XIIII.

Of the Predicament Where, called in Latine, Vbi.

How define you the Predicament Vbi?

Vbi is to be in ſome place, as when a body is incloſed within a place, and therefore is defined of ſome, to bee the deſcription of the place wherein any thing is ſaid to be, or to be done or made, as in the heauens, in the earth, in the temple, in the houſe, and ſuch like.

How is this predicament diuided?

Into *Vbi ſimplex*, and *Vbi compoſitum*, that is to ſay, ſimple and compound.

When is it ſaid to be ſimple?

When a thing indiuiſible is in ſome indiuiſible place, as an Angell in *Puncto*; or when a thing indiuiſible is in a place diuiſible, as an Angell in the Temple; for the Temple may be diuided into many parts, though the Angell cannot.

When is it ſaid to be compound?

When ſome diuiſible body is contained in a place diuiſible, as the being of things corporall in the water, or in the aire; for corporall things be ſo diuiſibly placed in their places, as euery part of the thing placed, is anſwerable to euery part of the place wherein they are contained; and ſo contrarily, as to the parts of a mans body enuironed with the aire, one part of that aire is anſwerable to the head, another to the feet, and ſo conſequently of all the reſt: and therefore the Schoolemen ſay, that *Vbi compoſitum*, is to be in a place circumſcriptiuely, but *Vbi ſimplex*, is to be in a place definitiuely, that is to ſay, in ſome certaine place, though not according to the poſition or order of placing the parts. But when a thing is ſaid to be in a place circumſcriptiuely, then ſuch place and thing may be both diuided according to the parts of poſition or placing, as this part here, and the other part there, whereof ſpring theſe differences, aboue, beneath, before, behinde, on the right ſide, on the left ſide, and ſuch like. And finally, this predicament comprehendeth whatſoeuer anſwereth to this queſtion, where any thing is ſaid to be or to be done.

What properties doe belong to the predicament, Where?

Three: First, to admit no contrarietie; for though to be aboue and beneath seeme to be contrarie, yet that is to be vnderstood physically, and not dialectically: secondly, it admitteth neither more nor lesse; for to be in the Temple, is no more to be in place, then to be in the market, or in any house: but the third and chiefest propertie of *Vbi* is to containe.

CHAP. XV.

Of the predicament When, *called in Latine*, Quando.

How define you this predicament?

This is said to be a relation or application of a thing measured by time, vnto time it selfe, and containeth the differences of times, whereby any thing is said to be, to haue beene, or shall be, to doe, or to suffer: and to speake briefly, it comprehendeth all words that answere to this question *When*, as yetterday, to morrow, the next day, and such like.

How is Quando *diuided?*

Two manner of waies; for sometime it is said to be definite, that is, certaine, as in this or that houre, day, or yeare, which is certaine; and sometime indefinite, that is, vncertaine, as to haue beene, without any limitation of time, which is vncertaine. Secondly, *Quando* may be diuided into his parts of succession, as into time past, present, and to come.

What properties doe belong to this predicament?

First, to haue no contrarietie: Secondly, to admit neither more or lesse: Thirdly, to be alwaies flitting or fluxible, and neuer permanent, which propertie it hath by reason of time which continually passeth away.

CHAP.

CHAP. XVI.

Of the predicament, to be ſituated, called in Latine, Situm eſſe.

What is Situm eſſe?

Quintilian ſaith, that *Situm eſſe* is as much to ſay, as to be ſituated, ordered, or placed ſome manner of way; and it is a generall word, comprehending all names that doe expreſſe the ſite or ordering of the body and parts thereof, as to ſtand, to ſit, to lie either groueling, or right vp, or on the one ſide: and finally, it comprehendeth all thoſe words which anſwere to this queſtion, how any thing is ſituated, as when it is required how *Norwich* ſtandeth from *London*, either Northward, Southward, Weſtward, or Eaſtward.

How is ſite diuided of the Schoolemen?

Into ſite naturall and caſuall.

Which call you naturall ſite?

That whereby euery part of the body hath his naturall place; as in mans body, the head to ſtand aboue, the bellie in the midſt, and the feet beneath; and ſo in a tree, the root to be loweſt, the body in the midſt, and the boughes or branches to be higheſt.

What call you ſite caſuall?

That whereby the poſition or ordering of the parts is altered any way by accident, as, now to ſtand vpright, now to ſtoope, now to ſit, or to lie downe, this way, or that way.

What deſcriptions are to be fetched from this predicament?

The deſcriptions of places.

What properties doe belong to this predicament?

Two: Firſt, to admit no contrarietie; for though vpward ſeemeth to be contrarie to downward, yet that is vnderſtood phyſically, and not dialectically. Secondly, it hath neither more, nor leſſe; for to ſtand is no more a ſite, then to ſit, nor ſitting more then ſtanding.

Which things doe alter their ſituation, and which not?

All things without life and feeling, doe keepe their ſite, if by

violence they be not changed: but all things hauing life and feeling, doe alter their site, when and as often as it pleaſeth them, as a beaſt to ſtand vp, or to lie downe, and ſo forth.

The Table of Site.

Site is either
- Naturall, as
  - The head to ſtand aboue,
  - The bellie to be in the midſt,
  - And the feet beneath.
- Or caſuall, as
  - Going,
  - Standing,
  - Lying groueling, or
  - With the face vpward.

CHAP. XVII.

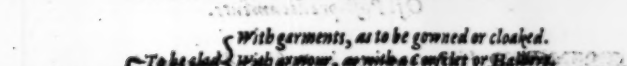
Of the predicament, To haue, *called in Latine,* Habere.

What doth this word to haue *ſignifie?*

It hath three ſpeciall ſignifications: Firſt, to be clad with garments, armour, or ornament: ſecondly, to poſſeſſe any thing, as to poſſeſſe wife, lands, or goods: thirdly, to containe any thing, as a veſſell to containe either liquid or drie matter that is powred therein: and therefore this predicament comprehendeth all ſuch words as are deriued of the names of garments, as to be gowned, cloaked, or coated: alſo of armour, as well defenſiue as offenſiue; defenſiue, as to be armed with a Corſelet, Iacke, or ſhirt of male, and ſuch like: offenſiue, as to be armed with a ſword, dagger, caliuer, halbert, or pike. Alſo beaſts and fiſhes are ſaid to be armed with nailes, hornes, tallons, beakes, ſcales, finnes, and ſuch like. Alſo it compreliendeth words of ornament, as to bee decked with Chaines, Iewels, and Tablets: alſo words of poſſeſſion, as to haue lands or goods: alſo words of containing, as to be full of wine, oile, or hony, as you may ſee in the Table following.

The

The Table of the predicament *To haue.*



What properties doe belong to this predicament?

Two: First, to admit more and lesse: for a man at armes is said to be more armed then a light horseman, and a Pikeman more then a Caliuer or Harquebuzier. Againe, he that is clad with two coats, is more clad then he that weareth but one. Secondly, this predicament admitteth in some sort contrarietie: for to be armed and vnarmed, clad and naked, are contraries by priuation, but not otherwise.

CHAP. XVIII.

Of the vse of the Predicaments.

TO what vse or end doe these predicaments serue?

TO many good vses. First, if you will define any thing, you shall be sure in some of these predicaments to finde out the generall kinde thereof, together with all the differences (for the most part) belonging to the same: which if they bee not set downe, then they are to be gathered out of the proper accidents incident to the thing which you would define. Secondly, if you would diuide any thing, here you shall finde both the generall kindes, speciall kindes, yea and diuers examples of the Individuums comprehended vnder the same kindes. Thirdly, out of these predicaments you may gather matter apt to proue any question, either generall or particular.

CHAP. XIX.

Of Post-predicaments.

WHat meane you by Post-predicaments?

They be interpretations of certaine words more plainly expounded after the predicaments, for the better vnderſtanding of certaine of the ſaid predicaments.

Which are they?

Theſe fiue, *Oppoſitio, prius & poſterius, ſimul, motus, & habere*, that is to ſay in Engliſh, *Oppoſition, before and after, together, moouing*, and *to haue*: euery one whereof may be taken and interpreted diuers waies.

What is oppoſition?

Oppoſition is the repugnancie or contrarietie of two extremes which are contrary one to another, in ſuch ſort as none of them is in like manner repugnant to any other thing: as for example, white and blacke being two extremes, are more contrary one to another, then either of them is to any other colour, as to red, yellow, ruſſet, or blew.

Sith ſome things are ſaid to be agreeable one to another, and ſome contrary one to another, and ſome diuers one from another; it were not amiſſe, firſt here to tell how, and when things are ſaid to be agreeable, diuers, or repugnant one to another.

Things are ſaid to be agreeable one to another three manner of waies: Firſt, when they agree in generall kinde, as thoſe which are ſubiect to one next generall kinde, as man and horſe do agree in generall kinde, becauſe this word *animal*, or ſenſible body, is the next generall kinde to them both. Secondly, things are ſaid to agree in ſpeciall kinde, as *Edward* and *Iohn* are both comprehended vnder this word *man*. Thirdly, things are ſaid to agree in number, as words hauing one ſelfe ſignification, called in Greeke *Synonyma*, as a blade, a rapier, a cuttilas or ſtucke, ſignifying a ſword: alſo things of like ſubſtance or definition, as man, and a ſenſible body endued with reaſon. And by theſe three waies things are ſaid alſo to differ one from another; for they

may

may differ one from another in generall kinde, in speciall kinde, and in number: in generall kinde, as a sensible body, and a tree; in speciall kinde, as a horse, and an asse: againe, they may differ in number, as the Indiuiduums that be comprehended vnder one speciall kinde, as *Iohn* and *Edward*, doe differ only in number.

Is it all one, to be diuers, and contrarie?

No: for those things are said to be diuers, which differ any of the waies abouesaid, or by any other difference, be it common, proper, or most proper. Yet few or none of these things are contrarie one to another: for no substance admitteth contrarietie, nor yet many accidents, vnlesse it be by reason of qualitie, whereunto contrarietie doth properly belong.

How many waies are things said to be contrarie one to another?

Foure manner of waies, that is, relatiue, contrarie, priuatiue, and contradictorie, that is to say, by relation, by contrarietie, by priuation, and by contradiction.

Which things are said to be opposite or contrarie by relation?

Those things are opposite by relation, which according to their owne significations, haue mutuall relation one to another, neither can they be both verified of one selfe thing in one selfe respect, as the father and the sonne, the Lord and the bondman: for one man cannot be both a father and a sonne in one respect, but in diuers respects he may: for euery man that hath a sonne, is notwithstanding a sonne to his owne father, and a father to his owne sonne.

Which things are said to be opposite by contrarietie?

Those things are said to be contrarie, which being comprehended vnder one selfe kinde, doe most differ one from another, and yet both may be one after another in one selfe subiect meet to receiue the same, because the one giueth place to the other, vnlesse it be such a thing as is naturally incident to the said subiect: as heat and cold, being contained vnder qualitie, are most contrarie one to another, and yet may be one after another in mans body, or any other subiect apt to receiue the same: for many times heat driueth out cold, and cold heat. Yet in fire it is not so: for heat is alwaies naturally incident to fire, and will neuer giue place to cold, so long as it is fire, and not extinct.

How-

How are contraries diuided?

Of contraries, some haue a meane, called of the Schoolemen, *Contraria mediata*, and some haue no meane, called, *Contraria immediata*.

When are they said to haue a meane?

When the two contraries are such, as neither of them is of meere necessitie, in any subiect meet to receiue the same, as white & blacke: for that subiect which is apt to receiue them both, may be yellow or russet, and so the subiect is neither white nor blacke.

When are they said to haue no meane?

When the one of the two contraries may be alwaies truly affirmed of any subiect apt to receiue the same, as sickenesse and health; for man or beast is truly said to be either sicke, or whole. Also vice and vertue haue no meane: for a man is said to be either good, or euill: yet some make good and euill to haue a meane, called a thing indifferent. Likewise, hot and cold to haue a meane, that is to say, luke-warme. And betwixt health and sickenesse *Galen* maketh a meane estate, that is to say, neither whole nor sicke, but betwixt both.

Which are opposites by priuation?

Opposites by priuation are two contraries belonging to one selfe subiect apt to receiue the same, in the which subiect, when the one is wanting at such time as nature doth appoint, the other must needs be, as light and blindnesse in the eie, hearing and deafnesse in the eare, light and darknesse in the skie, or in any other thing meet to receiue both.

Wherefore doe you adde this clause, at such time as nature doth appoint?

Because it is not needfull that one of these opposites be in the subiect in all times: as for example, the whelpe which is not nine daies old, though as yet hee seeth not, yet is hee not said to bee blinde, because Nature hath appointed him no sooner to see.

Which be opposite by contradiction?

They be two contraries, hauing no meane, and doe consist in contradiction, that is to say, in denying the one the other: and such contradiction consisteth either in propositions, or else in simple or single termes.

Giue

Giue examples of both.

In propoſitions thus: *Iohn* is honeſt, *Iohn* is not honeſt: *Plato* diſputeth, *Plato* diſputeth not: in which kinde of propoſitions, there is no meane of truth or falſhood; for of neceſſitie the one of them muſt alwaies be either true or falſe, in ſuch ſort, as both cannot be true together, nor both falſe together. In ſimple termes thus: a man, no man: to know, not to know: to be, and not to be: and therefore oppoſites by contradiction be moſt contrarie, and doe differ from all the reſt; for in all the other oppoſites, it is eaſie to finde out ſome meane ſubiect, whereof neither of them can be truly ſpoken or affirmed.

CHAP. XX.

Of before and after, called in Latine, Prius & Poſterius.

How many waies is a thing ſaid to be before and after?

Fiue manner of waies, that is, by time, nature, order, honour, and cauſe, contained in theſe two Latine verſes:

Tempore natura, prius ordine dic & honore:
Et cauſa effectis dicitur eſſe prior.

Giue examples of euery one.

Firſt, by time, *Cicero* is ſaid to be before *Quintilian*, and *Socrates* before *Ariſtotle*, and ſuch like. Secondly, by nature, that thing is ſaid to be firſt, or before, from which the conſequent cannot returne backward: by which way all generall kindes are ſaid to be before their ſpeciall kindes, and ſpeciall kindes before their Indiuiduums: for if man be, then ſenſible body (which is the generall kinde) muſt needs be, but not contrarily: ſo likewiſe, if *Iohn* be, man muſt needs be, but not contrarily; for it followeth not of neceſſitie, Becauſe it is a ſenſible body, *Ergo* it is a man, or becauſe it is a man, *Ergo* it is *Iohn*. Thirdly, by order one thing is ſaid to be before another, as one before two, and two before three, letters before ſyllables, and ſyllables before words, and words before ſpeech. To this alſo appertaineth that which is ſaid

to be before by ſituation, as in going from *Norwich* to *London*, *Thetford* is before *Newmarket*, and *Newmarket* before *Ware*, and ſo forth. Fourthly, by honour or dignitie, an Emperour is ſaid to be before a King, a King before a Duke, a Duke before an Earle, an Earle before a Baron, &c. Fiftly, the cauſe is ſaid to be before his effect, as the riſing of the Sunne is ſaid to be before day: ſo the difference is ſaid to be before his ſpeciall kinde, and the ſpeciall kinde before his propertie. And theſe be conuertible: for if it be day, the Sunne muſt needs be vp: and if the ſpeciall difference be, the ſpeciall kinde muſt needs be, and ſo contrarily.

To what end ſerueth this manifold way of before and after?

To the intent that wee may the better vnderſtand what hath beene ſaid before touching oppoſites by relation, that is to ſay, that Relatiues are alwaies together by order of nature, and not one before another, but only by their fourth way, that is to ſay, by honour or worthineſſe, which way, as *Ariſtotle* ſaith, of all the other waies, is moſt vnproper, and leaſt to the purpoſe.

CHAP. XXI.

Of the word Together, *called in Latine,* Simul.

How many waies are things ſaid to be together?

How many waies are things ſaid to be together? Two waies, that is, by order of time, and by order of nature. Firſt, by order of time, the heat and ſhining of the Sunne are ſaid to bee in the Sunne together, that is, at one time: alſo the Angels were created all together, and at one time. Secondly, thoſe things are ſaid to be together by order of nature, which haue naturall relation one to another, and be conuertible, neither is the one cauſe of the other, as the father and the ſonne, ſingle and double, and ſuch like: and many doe adde hereunto diuers ſpeciall kindes and differences ſubiect to one ſelfe generall kinde, as man and bruit beaſt, reaſonable and vnreaſonable, are ſubiect to the generall kinde, ſenſible body, or *animal*.

CHAP.

CHAP. XXII.

Of Moning or Motion, called in Latine, Motus, *and of the kindes thereof.*

Wherefore is mention made here of moning?

For the better vnderſtanding of the Predicament Action, whereunto Mouing belongeth.

How many kindes of motion or mouing be there?

Six, briefly touched before in the predicament of Action, that is to ſay, generation, corruption, augmentation, diminution, alteration, and mouing from place to place.

Define theſe kindes.

1 Generation is a proceeding from the not being of a ſubſtance, to the being of the ſame, as from an Acorne to an Oke.

2 Corruption (contrariwiſe) is a proceeding from a being to a not being, as from an Oke to chips or aſhes.

3 Augmentation is the increaſing of a greater quantitie in the whole: as from a childe to a man.

4 Diminution is contrariwiſe a decreaſing or diminiſhing of quantitie in the whole, as a body that conſumeth or pineth by diſeaſe or otherwiſe.

5 Alteration is a proceeding or changing from one qualitie into another, as from hot to cold.

6 Mouing from place to place, is, as the mouing of the ſunne out of the Eaſt into the Weſt.

CHAP. XXIII.

Of the word Habere, *that is,* to haue, *and how many waies it is to be vnderſtood.*

How many ſignifications hath this word, to haue?

Eight.

1 Firſt, to haue a qualitie, as ſcience, vice, or vertue.

2 To haue a quantitie, as to be ſix, ſeuen, or eight foot long.

3 To be clad, as to haue a cloke or coat.

4 To haue some part of the body clad or decked with some thing, as the finger with a ring, the necke with a chaine.

5 To haue a part, or member, as a hand, a head, or foot.

6 To containe, as a hogshead that hath therein beere or wine.

7 To possesse, as to haue lands, tenements, or goods.

8 To haue a wife, which (according to *Aristotle*) is vnproperly said, because nothing can be properly said to haue, which is had it selfe of the same: for the wife hath the man, as well as the man the wife; and therefore this way of hauing serueth to little purpose.

Here endeth the first Booke.

THE

THE ART OF *LOGICKE.*

THE SECOND BOOKE.

CHAP. I.

Of Definition.

HAuing hitherto ſufficiently ſpoken of the Predicables and Predicaments, and of all things belonging vnto them, without the knowledge whereof, no true definition, nor good diuiſion, can bee well made; mee thinkes it were meet now to treat of definition and diuiſion.

What is Definition, and how manifold is it?

Definition is a ſpeech, whereby either ſome name or thing is declared: and it is twofold, that is, of a name, and of a thing.

What is definition of a name, and how manifold is it?

Definition of a name, is a ſpeech whereby the ſignification of ſome word is declared: and it is ten-fold.

1 Definition verball, as when a word leſſe knowne is declared by a word more knowne, as thus, To imitate, is as much to ſay, as to follow, or to counterfet: againe, to accompliſh, is to fulfill.

2 Definition by difference; as, He is a King, which ruleth by Law; but he that ruleth by force, is a Tyrant.

3 Definition metaphorically, or by figure; as, Adoleſcencie is the flower of mans age: Good Preachers are the ſalt of the earth.

4 Definition by contrarie; as, Vertue is, to flee vice.

5 Definition by circumlocution; as, The writer of the *Troian* warre, that is to ſay, *Homer*.

6 Definition by example, as to ſay, that this word reaſonable or vnreaſonable is a ſpeciall difference.

7 Definition by want, or defect; as, That is three quarters, which lacketh a quarrer of a yard, or any ſuch like thing.

8 Definition by praiſe, or diſpraiſe: by praiſe, as, Logicke is an Art of Arts, and Science of Sciences: Iuſtice is the Queene of all vertues. By diſpraiſe, as, Idleneſſe is the corruption or deſtruction of youth.

9 Definition by ſimilitude; as, The Sunne is the eie of the world; A Citie without a Magiſtrate, is as a ſhip without a Gouernour.

10 Definition by Etymologie; as, He is rightly called goodman, becauſe he is a good man indeed, and full of good workes.

When is definition of the name needfull to be vſed?

When ſome doubtfull word is cauſe of the controuerſie.

Of the definition of a thing.

What is the definition of a thing?

It is a ſpeech, which declareth briefly, plainly, and aptly, the very nature and ſubſtance of the thing which is defined.

How is the definition of a thing diuided?

Into theſe ſix kindes, that is to ſay, into definition eſſentiall, cauſall, by the Relatiue, by the effects and offices, by numbering vp of the parts, and by heaping vp of accidents.

What is definition eſſentiall?

It is that which conſiſteth of the next generall kinde, ioined with ſome ſpeciall difference or propertie belonging to the ſame kinde; as when I define a man to be a ſenſible body, endued with reaſon, or apt to ſpeake: and this is the Logicall definition moſt

ſure

ſure of all others, but not eaſie to be made of euery thing, for lacke of ſpeciall differences and naturall properties.

When is it ſaid to be a cauſall definition?

When it is made of the generall kinde, and of the proper cauſes of the thing defined.

How many chiefe kindes of cauſes be there?

Foure, that is, matter, forme, cauſe efficient, and end.

How define you matter?

Matter is that whereof any thing is made, as cloth is the matter whereof a cloake or coat is made, and wooll is the matter of cloth.

What is Forme?

Forme is the ſhape whereof any thing taketh both his being and his name: and therefore the Schoolemen doe define forme to be that which giueth a being to any thing, be it naturall or artificiall, as in the examples before recited, the coat or cloake hath both his being and name of the ſhape which it hath, and not of the matter.

What is the cauſe efficient?

That which maketh or worketh any thing, and is the authour thereof, as the Carpenter is the cauſe efficient of the houſe, and Shipwright of the ſhip.

What is the end, or finall cauſe?

It is that for whoſe ſake any thing is done, as the end of warre is to haue peace, the end of ſtudie is to get learning and knowledge.

Giue examples of definitions made of euery one of theſe cauſes.

Of matter let this bee your example: Beere is a drinke made of mault, water, and hops. Of forme thus: Man is a ſenſible bodie, endued with a ſoule intellectiue or reaſonable, which is the true ſhape of man. Of the cauſe efficient thus: That is a Decree of the Senate, which the Senate commandeth and ordaineth; for the Senate is the cauſe efficient of the Decree. Anger or wrath is the boiling of the bloud about the heart, through the ſtirring vp of choler. Of the end thus: A houſe is a building made to defend our bodies from the iniuries of the aire and weather.

May not a good definition be made of many of theſe cauſes ioined together?

Yes indeed.

Giue example.

Loe here the example of *Demoſthenes*, in defining what Law is. Law (ſaith he) is the inuention and gift of God, and the decree of wiſe men, the correction of crimes, either raſhly or aduiſedly committed, and a common couenant or conſent of the Citie, according to the which all men ought to liue. In this definition, the firſt and chiefeſt cauſe efficient is God, the ſecond cauſe efficient is the common couenant or conſent of the Citie: the matter is the decree of the wiſe: the end is the correction of crimes, and the keeping of the Citizens in good order of life.

When is a definition ſaid to be made by the Relatiue?

When one Relatiue is interpreted by another; as thus, He is a father, which hath a ſonne; and he is a maſter, which hath a ſeruant.

When is a definition ſaid to be made by the effects, vertues, or offices of the thing defined?

When the nature of the thing is plainly declared by ſhewing the ſaid effects or offices, as thus: An adamant ſtone is that which being laid nigh to iron or ſteele, draweth the ſteele vnto him: Iuſtice is a vertue which giueth euery man his right.

When is a definition ſaid to be made by numbering vp of the parts?

When it containeth either the chiefe, or all the parts of ſome whole thing, or elſe all the ſpeciall kindes of ſome generall kinde.

Giue examples of both theſe waies.

Of the firſt thus: A houſe is a building, hauing a foundation, walles, and couering. Of the ſecond way thus: A ſenſible body is that which comprehendeth both man and bruit beaſt.

When is a definition ſaid to be made by heaping vp of accidents?

When a thing is rather deſcribed, then defined, by ſuch common and proper accidents as doe belong to the ſame, as fire is an element that is hot and drie, and exceedeth all other elements in lightneſſe: and therefore this laſt kinde of definition ought rather to be called a deſcription then a definition, which is vſuall to the Poets,

Poets, Orators, and Hiſtoriographers, in deſcribing either perſon, fact, or thing: alſo to the Phyſicians, in deſcribing their ſimples, as roots, plants, herbes, and ſuch like.

CHAP. II.

Of the precepts to be obſerued in Definition.

How many precepts are to be obſerued in making a true definition?

These three: First, that it briefly expreſſe the whole power and nature of the thing defined: Secondly, that there be nothing therein ſuperfluous, nor any thing wanting: Thirdly, that the definition be not common to many things, but proper to that thing only which is defined, ſo as it may make it to differ from all other things.

What order is to be obſerued in making a dialecticall definition?

First, you muſt know in what predicament the thing is contained which you would define, to the intent that in deſcending from the moſt generall kinde, downe towards the moſt ſpeciall kinde of the ſame predicament, ye may finde out by the way that which is next generall kinde to the thing that is to be defined: which next generall kinde being found out, yee muſt then ſeeke out the ſpeciall difference or propertie, the proper cauſe, effect, or common accidents belonging to the ſame: as for example, if ye would define what vertue is, ye muſt reſort to the predicament of qualitie, wherein vertue is contained: then in deſcending from qualitie, proceed to habit, from habit to habit of the minde, which is twofold, that is to ſay, intellectuall and morall, and not finding it vnder habit intellectuall, proceed to habit morall, for that is the next generall kinde to vertue: that done, ſeeke out the difference or propertie, true cauſe or effect: the difference is to be good, wherein it differeth from vice, for vice is alſo a morall habit as well as vertue: the effect of vertue is to incline mans will to doe alwaies according to right reaſon or true iudgement, ſo ſhall you make a true definition of vertue, in ſaying that vertue is a good morall habit, inclining mans will to doe alwaies according to

true iudgement. And after this ſort yee may learne to define any other thing.

CHAP. III.

Of Diuiſion.

What is Diuiſion?

WHat is Diuiſion?

Diuiſion is the parting or diuiding of a word or thing that is more generall, vnto other words or things leſſe generall: for Diuiſion is twofold, that is, of a name, and of a thing.

When is it ſaid to be the diuiſion of a name?

When ſome Equiuoke or doubtfull word is diuided into his manifold ſignifications, as this word Wolfe, into a man hauing that name, into a foure-footed beaſt, into an vlcerous ſore, and into a certaine fiſh, each one called by the name of Wolfe: which kinde of diſtinction or diuiſion is very neceſſarie, to auoid ambiguitie of ſpeech, which ambiguitie cauſeth many times great errour.

How manifold is the diuiſion of a thing?

It is threefold, that is, ſubſtantiall, partible, and accidentall.

When is it properly ſaid to be ſubſtantiall?

When any generall kinde is diuided by his ſpeciall differences into his proper ſpeciall kindes: as thus; of ſenſible bodies, one is reaſonable, as man, and another is vnreaſonable, as a bruit beaſt.

When is this kinde of diuiſion to be vſed?

When the ſpeciall kindes lacke proper names, as moſt commonly the ſpeciall kindes ſubalternate doe, which may be diuided againe as generall kindes into more ſpeciall kindes: as for example, of vnreaſonable beaſts ſome be terreſtriall, ſome bee aquaticall, and ſome aierie: againe, euery one of theſe may bee diuided into their ſpeciall kindes, euen vntill ye come to the loweſt of all, and vnto the *Individuums* comprehended vnder the ſame; and that not only of things contained in the predicament of ſubſtance, but alſo in any other predicaments of accidents, as of magnitudes, one is long, as a line, another is broad, as a ſuperficies, and another is thicke, as a body. This diuiſion, though it be

be of accidents contained in the predicament of quantitie, yet it is called a ſubſtantiall diuiſion, becauſe the generall kinde here is diuided by his ſpeciall difference into his proper ſpeciall kindes.

What call you a partible diuiſion?

I call that a partible diuiſion, which diuideth ſome whole thing into his parts, which is called of the Latines, *partitio*; as if yee would diuide the Romane Common-wealth into Senators, Knights, and Commons. You may alſo diuide a houſe into his principall parts, as into the foundation, walles, and roofe thereof. But the better to vnderſtand this kinde of diuiſion, it ſhall not be amiſſe to ſhew you here what kindes of whole, and what kindes of parts there be: for there is whole ſubſtantiall, and whole integrall: againe, of parts, ſome are called ſubſtantiall, and ſome integrall; and of parts integrall, ſome are called ſimilar or like, and ſome diſſimilar or vnlike: againe, of the diſſimilar, ſome are called principall, and ſome not principall: of all which things I minde here briefly to ſpeake.

Firſt, I pray you tell what you meane by whole ſubſtantiall, and whole integrall.

Whole ſubſtantiall, is that which conſiſteth of ſubſtantiall parts cleauing wholly together, and not ſeuerally diſtinct in number, as whole man, conſiſting of ſoule and body: but whole integrall is that which conſiſteth of integrall parts, which though they cleaue together, yet they are diſtinct and ſeuerall in number, as mans body, conſiſting of head, breſt, bellie, legs, &c.

How define you ſubſtantiall parts?

Subſtantiall parts are the firſt and chiefe parts whereof any thing is compounded, of which parts if any bee wanting, the whole muſt needs periſh, and loſeth his name, as the matter and forme of any compound thing, be it naturall or artificiall, as the body and ſoule are the firſt and chiefe parts of man; the metall and faſhion of a ſiluer cup are the firſt and chiefe parts of the cup, whereof neither can be wanting: for the ſoule without the bodie is a ſpirit, and not man; and the body without the ſoule is but a dead carcaſe: againe, the cup without matter or ſhape, is no cup at all.

Which be called integrall parts?

Certaine ſecondarie parts, which being all gathered together, do make the whole perfect, as the head, breſt, bellie, armes, hands, thighes, legges, and feet, are the integrall parts of mans bodie: and of theſe integrall parts, ſome are called ſimilar, and ſome diſſimilar, that is to ſay, like and vnlike.

Which are ſimilar, and which diſſimilar?

Similar, or like, are theſe that be of one kinde, and of one ſelfe name; and being diuided into parts, euery ſuch part, be it neuer ſo ſmall, beareth alſo the name of the whole, as fleſh, bone, ſinew, skin, and ſuch like: for euery little part of the fleſh is called fleſh, and euery part of bone is called bone; and ſo of all the reſt. Hitherto alſo may be referred water, fire, gold, iron, or any other ſimple metall, wine, wood, ſtone, and ſuch like: for euery drop of water is called water, and ſo of the reſt.

Which call you diſſimilar or vnlike?

Thoſe parts that differ both in kinde and name, as the head, breſt, bellie, armes, and legges, are the parts diſſimilar of a mans body: likewiſe a houſe, a ſhip, and many other things, haue alſo ſuch parts, of any one of which parts the whole cannot be ſpoken: for you cannot ſay, Becauſe here is the head of a man, *Ergo* here is a man. Againe, of theſe diſſimilar parts, ſome are called principall, whereof if any be wanting, the whole muſt needs periſh; as without the head, bellie, heart, liuer, or guts, mans body cannot be. The not principall, are thoſe parts without the which the body may be: for though thoſe parts be wanting, yet the body is counted a whole thing, though not perfect in euery point, as without armes, hands, legges, or feet, the body may liue: that building alſo that hath a foundation, walles, and roofe, is counted to be a whole houſe, though it hath neither doores nor windowes, yet not perfect in euery reſpect.

Wherein doth partition and diuiſion differ?

In diuers points: for in diuiſion any generall kinde may bee rightly ſpoken of euery ſpeciall kinde contained vnder the ſame; as this word, *ſenſible body*, which is ſpoken both of man and beaſt. But in partition, the whole cannot be ſpoken of euery part: for you cannot ſay that the ſoule or body of man is whole man, nor that the head or foot is his whole body. Againe, diuiſion diuideth

vniuerſall

vniuerſall things into their particulars, and partition diuideth particulars into their parts, and moſt commonly followeth diuiſion, helping to make ſubdiuiſions: as for example, when diuiſion hath diuided a ſenſible body into man and beaſt, then followeth partition, and diuideth man into ſoule and body, and the body into his integrall parts, as head, breſt, bellie, legs, and ſuch like.

How manifold is diuiſion accidentall?

Threefold: for by that wee either diuide ſome ſubiect into his accidents, or ſome accident into his ſubiect, or ſome accident into his accidents.

Giue examples of all theſe three waies.

Of the firſt let this be your example: Of men, ſome be free, and ſome be bond; ſome be vertuous, and ſome be vicious: and after this ſort you may diuide the predicament of ſubſtance into as many accidents as you will, running thorowout all the nine predicaments of accidents. Of the ſecond way thus: Of goods, ſome are ſaid to be of the minde, ſome of the body, and ſome of fortune. Of the third thus: Of good things, ſome are ſaid to bee honeſt, ſome profitable, and ſome pleaſant or delectable: which kinde of diuiſion is much vſed of the Orators. To this alſo may be referred the common order of diuiding any ſpeech or oration into his parts, which the Orators call partition or diſtribution, whereby is ſet downe in what order euery thing ſhall be vttered and declared, which firſt, and which laſt, and ſo forth.

CHAP. IIII.

Of the precepts to be obſerued in Diuiſion.

How many precepts are to be obſerued in making a true diuiſion?

Three: Firſt, that the generall kinde be diuided into his next ſpeciall kindes, by ſuch ſpeciall differences as are meerely repugnant one to another, and doe comprehend the whole nature of the thing diuided: as thus; Of ſenſible bodies, ſome be reaſonable, and ſome be vnreaſonable: for it were no good diuiſion, to ſay, of ſenſible bodies, one is reaſonable, & another is two-footed.

What is the ſecond precept?

That the parts, being ioined together, may bee equall to the whole, and may comprehend neither more nor leſſe then the thing which is diuided, as reaſonable ſoule, and carnall bodie, being the chiefe parts of man, doe comprehend neither more nor leſſe then whole man.

What is the third precept?

That no part or ſpeciall kinde be vſed as a generall kinde, nor the generall kinde as a part or ſpeciall kinde: as in this diuiſion which *Cicero* reproueth, I will ſhew that through the concupiſcence, boldneſſe, and couetouſneſſe of our aduerſaries, all miſchiefes haue chanced to the Common-wealth: here couetouſneſſe is mingled with concupiſcence, whereof it is a part: for concupiſcence is the generall kinde of all luſts or deſires. But this precept ſeemeth rather to appertaine to a Rhetoricall partition, then a Dialecticall diuiſion.

To what end ſerueth Diuiſion?

To diuers good ends. Firſt, as *Cicero* ſaith, it helpeth great'y to teach plainly to define, and to make things that be compound, intricate, or confuſed, to appeare ſimple, plaine, and certaine: Secondly, by diuiding things orderly into their parts, it greatly helpeth memorie: and thirdly, it helpeth to amplifie any kinde of ſpeech, and to make it more copious.

CHAP. V.

Of Method.

HAuing hitherto ſufficiently ſpoken of words, both ſingular and vniuerſall, and alſo of Definition and Diuiſion, which are the two chiefe inſtruments whereby all ſimple queſtions are diſcuſſed, I minde here to ſhew with what order or method euery ſuch queſtion is to be handled.

What is Method?

Method is a compendious way of learning or teaching any thing: and it is three-fold, that is to ſay, Compoſitiue, Reſolutiue, and Diuiſiue or definitiue.

What

What is method compositiue?

It is that whereby wee compound the whole of his parts, beginning at the ſmalleſt, and ſo proceed from greater to greater, vntill we come to the chiefe end whereto we tend, which kinde of order or method we obſerue here in writing this Logicke: for firſt we treat of words or termes, then of a propoſition, and laſt of all of a Syllogiſme. So likewiſe he that will teach the nigheſt way from *Norwich* to *London* by order compoſitiue, will bid him firſt go to *Windham*, from *Windham* to *Atleborough*, from *Atleborough* to *Thetford*, from *Thetford* to *Newmarket*, from *Newmarket* to *Barkway*, from *Barkway* to *Ware*, from *Ware* to *London*.

What is method reſolutiue?

It is that whereby any whole thing is reſolued into his parts: or when wee proceed from the end to the next and immediate cauſe thereof, and from that to the next cauſe of that, and ſo from one to another, vntill we come to the firſt cauſe of all, and moſt remote and furtheſt off: as when we reſolue a Syllogiſme into his Propoſitions, and a propoſition into his vttermoſt bounds or termes, which are the ſubiect and the predicate: and this way is vnlike to the other before recited, becauſe it goeth backward, as in the former example. If ye will teach the way from *Norwich* to *London* by method reſolutiue, ye muſt ſay that there is a Towne called *Ware*, twentie miles from *London*: next to that is a Towne called *Barkway*, and ſo till yee come to that which was firſt in method compoſitiue. To theſe two methods *Galen* addeth the third method, that is, method diuiſiue or definitiue.

What is that method?

It is, when in defining and diuiding we deſcend orderly from a moſt generall kinde to all the ſpeciall kindes contained vnder the ſame, and ſo to the loweſt of all: as hauing to ſpeake of qualitie, we define it, and diuide it into his foure ſpeciall kindes, and euery ſuch ſpeciall kinde into his parts and members, euen till we come to the loweſt of all, as you ſee in the Table of qualitie before deſcribed. Which kinde of method is more fully handled by my friend *Accontio*, in his little Treatiſe which he wrote in Latine, *de methodo*: the effect of which booke I thinke it not out of purpoſe to ſet downe euen here.

The effect of Accontius *his booke,* de methodo, *which he affirmeth to be the ſecond part or office of Logicke.*

FOr the firſt office of Logicke teacheth how to finde out the truth in any ſpeech: but method teacheth how to attaine to the Art or knowledge of any thing. In which method, three things (as he ſaith) are to be conſidered: Firſt, what method is: Secondly, what is the effect or vttermoſt end thereof: Thirdly, what be the cauſes of that end or effect.

Method is a certaine right way, whereby wee may ſearch out the knowledge of any thing; and hauing attained it, how to teach the ſame commodiouſly to any other, without examining whether it be true or falſe; for that belongeth to the firſt part of Logicke.

The effect or vttermoſt end of method, is the knowledge of any thing.

The cauſes of that end are theſe three, forme, matter, and cauſe efficient.

Forme here ſeemeth to be that which is knowne by all the parts of ſuch knowledge, being gathered together (as it were) into one ſelfe body: which parts are theſe; firſt, what the thing is; ſecondly, what be the cauſes thereof, and alſo what be the cauſes of thoſe cauſes, euen to the laſt or vttermoſt cauſe: thirdly, what be the effects, and alſo what be the effects of thoſe effects, as well when the thing is taken generally, as for ſome whole thing, or as when the whole is diuided into all his parts, euen vnto the parts indiuiſible.

Matter here is generally taken, and not for the matter of any determinate or certaine kinde: vnto which matter doe appertaine all things that be finite, perpetuall, and immutable, that is to ſay, all vniuerſals.

The cauſes efficient are partly thoſe things that are more knowne, as firſt, to know what the thing is by definition conſiſting of the generall kinde, and of the differences thereto belonging: ſecondly, what is the effect or end of the thing, as in thoſe things which doe not depend vpon our will: and thirdly, what be

be the cauſes of that end or effect, the conſideration of which end belongeth to thoſe things which doe depend vpon our will, and partly the cauſe efficient is the right applying or ordering of the more knowne things, which order containeth two parts: for firſt wee muſt proceed alwaies from the moſt generall kindes to the next generall kindes, as hauing to begin with the definition of the thing which you ſeeke to know, when need requireth, you muſt proceed from the moſt generall kinde of all, that is to ſay, from the higheſt generall kinde, and ſo deſcend downward, vntill you come to the thing that is to be defined: but if you haue to begin from the vttermoſt end of the thing, then next of al conſider that, from whence the end doth immediately ſpring, and what doth follow next to that, and ſo proceed from one to another, till you come to the firſt cauſe of all. Finally, if you haue to begin from the firſt cauſes, then you muſt orderly proceed from that which is firſt vnto the ſecond, and ſo to the third, and ſo forth vntill you come to the vttermoſt effect or laſt end.

Now as touching the ſecond part of applying or ordering the more knowne things, you muſt haue conſideration of euery whole thing, and of all his parts: wherefore if you haue to define any thing, Art, or ſcience, whereof you treat, you muſt define the whole, and then euery part thereof, vntill you come to the loweſt part thereof, and yet euery one in his proper place. And if you cannot comprehend in one definition all thoſe things that are to be referred to one head, then vſe diuiſion in diuiding the whole into his parts, and define euery ſuch part in order. But if all the parts which the thing containeth, haue not one ſelfe end, but diuers, then diuide it by ſuch differences as euery part may haue his proper end.

Moreouer, if the forme, matter, or cauſe efficient haue diuers reſpects and conſiderations, then (according to that diuerſitie) make diuers diuiſions, and firſt declare what is common to all the parts in generall, and what is proper to euery one in particular.

Finally, if ſome one whole thing lieth hidden, then it is to bee found out by looking into ſome of the particular parts thereof. And theſe are al the chiefeſt points contained in the Latine Treatiſe which my friend *Acontius* wrote *de methodo*. And though

that *Petrus Ramus* maketh but one kinde of method, that is to ſay, to proceed from the firſt principles or elements: yet I am ſure he will not denie, but that to goe forward and backward, be two diuers things, though not contrarie, as doth well appeare by the compoſitiue and reſolutiue method before defined.

I doe not yet perfectly vnderſtand by all this, with what method a ſimple queſtion is to be handled: therefore I pray you ſhew the true way and order thereof.

The method or way in handling a ſimple queſtion, dependeth vpon theſe 9. Interrogatiues, that is to ſay, 1. Firſt, what ſignifications the name or word hath, whereof the queſtion is made, and how it is to be taken. 2. Secondly, whether there bee any ſuch thing, or not. 3. Thirdly, what it is. 4. Fourthly, what be the parts or ſpeciall kindes thereof. 5. Fiftly, what be the cauſes. 6. Sixtly, what be the effects. 7. Seuenthly, what things be incident or appurtenant vnto it. 8. Eightly, what things are like vnto it. 9. And ninthly, what things bee contrarie to it. All which queſtions *Ariſtotle* reduceth into theſe foure, that is to ſay, Whether it be? What it is? What manner of thing it is? and, Why it is?

Giue example of a ſimple queſtion handled according to the nine queſtions before recited.

As for example: If we haue to treat of vertue, firſt, wee muſt ſhew the diuers ſignifications of vertue; for vertue ſignifieth ſometime power and abilitie, as when we ſay, vertue attractiue, vertue digeſtiue, or vertue expulſiue: but here vertue is to be taken for a morall habit, bringing forth good and commendable actions. Secondly, whether vertue be, or not, it plainly appeareth by the diuers doings of men, whereof ſome bee good, ſome bee bad. Thirdly, what vertue is, we know by the definition thereof, in ſaying, that vertue is a morall habit, inclining mans will to doe that which is alwaies good, and agreeable to true iudgement. Fourthly, the kindes of vertue be diuers, as Prudence, Iuſtice, Temperance, Fortitude, Modeſtie, and ſuch like. Fiftly, the cauſes of vertue be alſo diuers; for the cauſe efficient thereof is good, and mans will obedient to true reaſon, and to true iudgement: the matter or ſubiect of vertue is the minde or heart of man: the

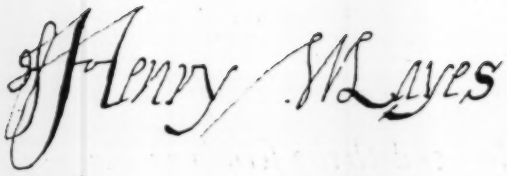
finall

finall cauſe is bleſſednesse. Sixtly, the effect of vertue is tranquillitie of the minde, and many proſperous ſucceſſes, and alſo publike vtilitie and peace. Seuenthly, things incident to vertue are theſe, the honour, praiſe, and commendation of good men. Eightly, things of affinitie or like to vertue, be all good inclinations, diſpoſitions, or good naturall affections, as to be louing, kinde, and mercifull. Ninthly, things contrarie to vertue, bee all manner of vices, as pride, couetouſneſſe, hypocriſie, diſſimulation, &c.

What method is to be obſerued in handling a compound queſtion?

A compound queſtion is to be handled by arguing and reaſoning on both ſides, whereof wee ſhall treat hereafter. In the meane time we haue to ſpeake of a Propoſition, without the which no argument can be made: for all arguments doe conſiſt of propoſitions.

Here endeth the ſecond Booke.



THE ART OF *LOGICKE.*

THE THIRD BOOKE.

CHAP. I.

Of a Propoſition.

WHat is a Propoſition?

It is a perfect ſpeech whereby ſomething is manifeſtly declared to be true or falſe.

Whereof is ſuch ſpeech ſpecially compounded?

Of Noune and Verbe, which Noune would be of the Nominatiue caſe, and the Verbe of the Indicatiue Mood, as when I ſay, Man is a ſenſible body; for the Logicians do ſeldome allow any ſuch ſpeeches as are either of the Optatiue, Imperatiue, Interrogatiue, or Vocatiue Mood, as, I would to God I had a good horſe: this ſpeech is not accounted to be ſo true or certaine, as to ſay, I haue a good horſe.

Of how many parts doth a Propoſition conſiſt?

Of three, that is to ſay, the Subiect, Predicat, and Copulat.

What is the Copulat?

It is the Verbe Subſtantiue, called in Latine, *Sum, es, fui*, that is, to be, which doth couple or ioine the Predicat with his Subiect,

iect, as when we ſay, Man is a ſenſible body: here in this propoſition, the word *man* is the ſubiect, and the word *ſenſible body* is the predicat, and the Verbe *is* is the copulat: which copulat is not alwaies incident to euery propoſition, and ſpecially when the predicat is ſome other Verbe, and not the Verbe ſubſtantiue; as, *Plato* diſputeth, *Socrates* walketh; which is as much to ſay, as *Plato* is diſputing, *Socrates* is walking.

How many waies is a propoſition diuided?

Three manner of waies, that is, according to ſubſtance, qualitie, and quantitie. According to ſubſtance thus: Of propoſitions, ſome are ſaid to be categoricall, that is, ſimple, and ſome hypotheticall, that is, compound, of which compound propoſitions we minde not to ſpeake, before we haue treated of all things belonging to a categoricall and ſimple propoſition, which is twofold. that is to ſay, abſolute and modall.

What is an abſolute categoricall propoſition?

It is a ſpeech which affirmeth or denieth ſomething abſolutely, without any reſpect; as when we ſay, God is true, or, Euery man is a lier: and this is otherwiſe called of the Logicians, *Propoſitio categorica de ineſſe.*

How is a ſimple propoſition diuided according to qualitie?

Into an affirmatiue and negatiue propoſition.

When is it ſaid to be affirmatiue, and when negatiue?

It is ſaid to be affirmatiue, when the predicat is affirmed of the ſubiect; as when I ſay, that *Iohn* is learned: and that is negatiue, when the predicat is denied of the ſubiect; as, *Iohn* is not learned. And note, that in ſuch kinde of ſpeech, the negatiue is alwaies ioined to the Verbe.

How many waies is a ſimple propoſition diuided according to quantitie?

Foure manner of waies, that is to ſay, into an vniuerſall, particular, indefinite, and ſingular propoſition.

When is it ſaid to be vniuerſall?

When ſome vniuerſall ſigne is added to the ſubiect.

Which words are ſaid to be vniuerſall ſignes?

Theſe: all, euery, whatſoeuer, whoſoeuer, none, no body, not one, none at all, euery where, no where, and ſuch like; as, Euery man is a lier, No man is true.

When

When is it ſaid to be a particular propoſition?

When ſome particular ſigne is added to the ſubiect.

Which call you particular ſignes?

Theſe: ſome, any, many, few, and ſuch like; as, Some man is wiſe, Few are wiſe.

When is it ſaid to be indefinite?

When the ſubiect is a common word, hauing neither vniuerſall nor particular ſigne added vnto it; as when wee ſay, Men in theſe daies be giuen to great follies.

When is it ſaid to be ſingular?

When the ſubiect is ſome *Individuum*, as when wee ſay, that *Cicero* is eloquent.

What, and how many queſtions doe riſe of theſe three diuiſions?

Theſe three: that is, of what kinde? of what qualitie? of what quantitie? in Latine thus, *quæ? qualis? & quanta?* for if it bee asked what kinde of propoſition it is, then you muſt anſwere, that it is either categoricall, or hypotheticall, that is, ſimple or compound: and if it be demanded of what qualitie it be, then you muſt anſwere, that it is either affirmatiue, or negatiue: if it be asked of what quantitie, then you muſt anſwere, that it is either vniuerſall, particular, indefinite, or ſingular.

CHAP. II.

Of the three properties belonging to a ſimple propoſition.

Which are thoſe?

Theſe: Oppoſition, Equiualencie, and Conuerſion.

What is Oppoſition?

It is the repugnancie of two ſimple propoſitions, hauing one ſelfe ſubiect, and one ſelfe predicat.

How many kindes of oppoſite propoſitions be there?

Foure: Contrarie, Subcontrarie, Contradictorie, and Subalternat.

Which are ſaid to be Contrarie?

An vniuerſall affirmatiue, and an vniuerſall negatiue; as, Euery man is iuſt, No man is iuſt.

Which are ſaid to be Subcontrarie?

A particular affirmatiue, and a particular negatiue; as, Some man is iuſt, Some man is not iuſt.

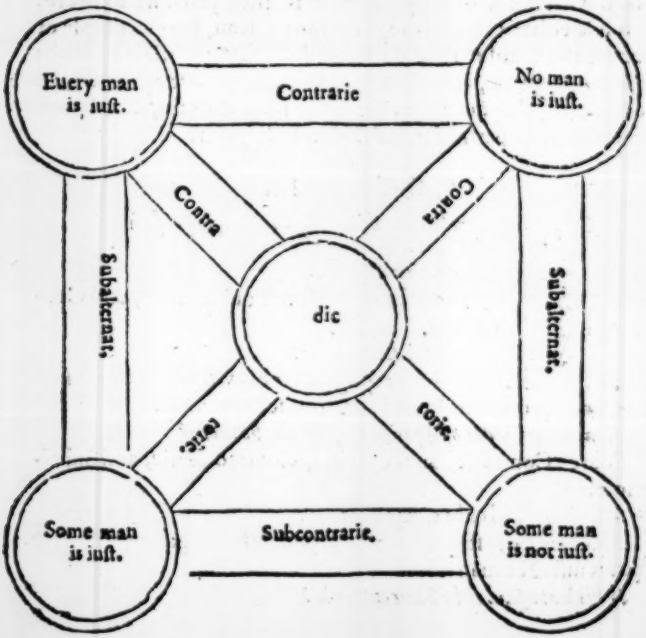
Which are ſaid to be Contradictorie?

Either an vniuerſall affirmatiue, and a particular negatiue, or elſe an vniuerſall negatiue, and a particular affirmatiue; as, Euery man is iuſt, and, Some man is not iuſt: or, No man is iuſt, Some man is iuſt.

Which are ſaid to be Subalternat?

Either an vniuerſall affirmatiue, and a particular affirmatiue, or elſe an vniuerſall negatiue, and a particular negatiue: as, Euery man is iuſt, and, Some man is iuſt: No man is iuſt, and, Some man is not iuſt.

All which kinde of oppoſites you may the better remember, by conſidering with what order they are placed in this Figure following.



CHAP. III.

Of the Lawes and conditions belonging to theſe foure kindes of oppoſites before recited: and of the diuers matter of a Propoſition.

FOr the better vnderſtanding of the lawes belonging to the oppoſites, it ſhall bee neceſſarie to ſpeake ſomewhat of the matter of a propoſition, whereupon the ſaid lawes doe partly depend.

How manifold is that matter?

Threefold, that is to ſay, naturall, caſuall, and remote or vnnaturall.

When is a propoſition ſaid to conſiſt of matter naturall?

When the predicat agreeth with his ſubiect eſſentially, or at the leaſt neceſſarily: as when the generall kinde is ſpoken of his ſpeciall kinde, and the ſpeciall kinde of his Indiuiduums, or the difference of his ſpeciall kinde, or the propertie of his ſubiect: as, Euery man is a ſenſible body, *Iohn* is a man, Euery man is reaſonable, Euery man is apt to ſpeake.

When is a propoſition ſaid to conſiſt of matter contingent?

When the predicat agreeth with his ſubiect accidentally, ſo as it may either be, or not be; as, *Iohn* is learned.

When is a propoſition ſaid to conſiſt of matter remote or vnnaturall?

When the predicat agreeth no manner of way with the ſubiect; as, A man is a horſe, A man is a ſtone, &c.

What are the lawes of contrarie propoſitions?

Contrarie propoſitions can be true no way both together; as, Euery man is a ſenſible body, No man is a ſenſible body: but they may be both falſe, and ſpecially conſiſting of matter contingent; as when I ſay, Euery man is iuſt, No man is iuſt, which are both falſe.

What are the lawes of ſubcontrarie propoſitions?

Subcontrarie propoſitions, conſiſting of matter naturall, cannot be both falſe at once; as, Some man is a ſenſible body, Some man is not a ſenſible body: but conſiſting of matter contingent, both may be ſometime true; as, Some man is iuſt, Some man is not iuſt.

What be the lawes of contradictorie propoſitions?

Thoſe can neither be true nor falſe both at once: for if one bee true, the other muſt needs be falſe, whether the matter be naturall, or contingent; as, Euery man is iuſt; Some man is not iuſt: No man is iuſt; Some man is iuſt.

What be the lawes of ſubalternat propoſitions?

If the vniuerſall be true, the particular muſt needs be true: as, Euery man is iuſt, *Ergo* ſome man is iuſt; but not contrarily. Againe, if the particular be falſe, the vniuerſall alſo muſt needs be falſe; as, Some man is a ſtone, Euery man is a ſtone.

What good is to be reaped by the knowledge of theſe oppoſites?

It teacheth to know what ſpeeches be repugnant one to another, and thereby to diſcerne truth from falſhood.

CHAP. IIII.

Of the equiualencie of ſimple propoſitions.

What is equiualencie?

It is the reconciling or agreeing of two propoſitions, hauing one ſelfe ſubiect, and one ſelfe predicate, in ſuch ſort, that though they be diuers in words, yet they are made to bee all one in ſignification.

How is ſuch reconciliation made?

By the helpe of ſignes, either vniuerſall or particular, that are of like value, and equall one to another, and thereby make the ſpeeches equall.

Giue example.

As thus: Who knoweth not this to be true? Euery man knoweth this to be true: There is none but that knoweth this to bee true. All theſe are of like value, and doe ſignifie one ſelfe thing. Againe, Some men are wiſe, Few men are wiſe, All men are not wiſe, Not many are wiſe, are alſo equiualent ſpeeches. The Schoolemen doe giue diuers rules touching the equiualencie of ſpeeches; but ſuch as, in mine opinion, are neither neceſſarie, nor profitable, for that they cauſe many times barbarous, vnuſuall, and intricate ſpeeches. And therefore I thinke good here to paſſe them ouer with ſilence, wiſhing all men to iudge the equiualencie of ſpeeches, rather by the eare, and by cuſtome of ſpeaking,

king, and by vſuall manner of taking the ſame in euery ſeuerall tongue or language, then by any rules, which perhaps will ſerue in one tongue, but not in another.

CHAP. V.

Of conuerſion of ſimple propoſitions.

What is conuerſion?

WHat is conuerſion?

It is the changing or turning of the ſubiect and predicate, the one into the others place.

How manifold is ſuch conuerſion?

It is threefold, that is, ſimple, by accident, and by contrapoſition.

What is ſimple conuerſion?

It is that whereby the termes are onely changed the one into the others place, the ſelfeſame quantitie and qualitie being ſtill reſerued.

What propoſitions are conuerted by this manner of conuerſion?

An vniuerſall negatiue, and particular affirmatiue.

Giue examples of both.

Of the firſt thus: No vertue is diſcommendable, *Ergo* no diſcommendable thing is vertue. Of the ſecond thus: Some man is a Philoſopher, and ſome Philoſopher is a man. And by this way ſometime vniuerſall affirmatiues may be alſo conuerted, as thoſe whoſe termes are conuertible, as the ſpeciall kinde and his difference or propertie; as, Euery man is reaſonable, and euery reaſonable thing is man: or, Euery man is apt to ſpeake, and euery thing that is apt to ſpeake, is man.

What is conuerſion by accident?

It is that whereby the termes are changed, and alſo the quantitie of the propoſitions, but not the qualitie.

What propoſitions are conuerted this way?

An vniuerſall affirmatiue into a particular affirmatiue, and an vniuerſall negatiue into a particular negatiue.

Giue examples.

Euery patience is fortitude: *Ergo* ſome fortitude is patience. Againe: No vertue is vice: *Ergo* ſome vice is not vertue.

What is conuerſion by contrapoſition?

It is that whereby neither quantitie nor qualitie is changed,

but only termes finite into termes infinite, that is to ſay, termes limited into termes vnlimited.

Which call you termes infinite?

All Nounes hauing a negatiue ſet before them, as, not man, not beaſt.

What propoſitions are conuerted this manner of way?

An vniuerſall affirmatiue into an vniuerſall affirmatiue, and a particular negatiue into a particular negatiue.

Giue examples.

Of the firſt thus: Euery man is a ſenſible body, and euery thing that is not a ſenſible body, is not man. Of the ſecond thus: Some vertue is not Iuſtice: *Ergo*, ſome thing that is not Iuſtice, is not vertue. Theſe ſpeeches in Engliſh haue ſome ſauour; but to be ſpoken in Latine, after the Schoole manner, are very barbarous, or rather monſtrous, as *Valerius* termeth them, as to ſay, *Quædam non Iuſtitia non eſt non virtus.*

CHAP. VI.

Of a Modall Propoſition.

What is a modall propoſition?

It is that which affirmeth or denieth ſomething, not abſolutely, but in a certaine reſpect, ſort, or mood, which mood is commonly the predicat in this kinde of propoſition, and all the reſt of the ſubiect called of the Logicians, *Dictum.*

What is a mood?

Mood is a word determining and limiting the ſignification of ſome other word whereunto it is ioined, as a wiſe man, a white horſe: for here this word wiſe being added to man, doth limit and reſtraine the generall ſignification of the word man, which otherwiſe of it ſelfe comprehendeth both wiſe and fooliſh. And the like is to be ſaid of any other generall word, whereunto any ſuch addition is put: but of moods making modall propoſitions, there are but theſe foure, that is, Poſſible, Contingent, Impoſſible, and Neceſſarie.

How manifold is a modall propoſition?

Twofold, that is, Coniunct and Diſiunct.

When

When is it ſaid to be Coniunct?

When the mood is placed either in the beginning or ending of a propoſition; as, It is impoſſible that *Iohn* is ſicke: or thus; That *Iohn* is ſicke it is poſſible.

When is it ſaid to be Diſiunct?

When the mood is placed ſo, as it diuideth the one part of the ſubiect from the other; as, for *Iohn* it is poſſible to be ſicke: and the Diſiunct is ſaid many times to be true, when the Coniunct is falſe, being both made of ſelfe termes: as for example, the Logicians affirme this to be true, A white man it is poſſible to bee blacke: but this other, A white man to be blacke it is poſſible, they affirme to be falſe.

What maketh them ſo to doe, ſith by conſtruction theſe two ſpeeches in ſenſe doe ſeeme to be all one?

Becauſe the mood is the Diſiunct, which by parting and ſeuering the Subiect, maketh the Propoſition to ſeeme ſpoken in diuers reſpects, as man to be white in one reſpect, and blacke in another, and ſo the ſpeech to be true.

CHAP. VII.

Of the propoſition, equiualencie, and conuerſion of modall propoſitions.

WE told you before, that of modall propoſitions, ſome were called coniunct, and ſome diſiunct: and as for the modals diſiunct, they differ but little from abſolute propoſitions before declared. And therefore we haue here chiefly to deale with oppoſition, equiualencie, and conuerſion belonging to modall coniunct, the matter whereof being not altogether ſo neceſſarie as ſome men affirme, I minde to make no long ſpeech thereof. But for the better vnderſtanding of oppoſition, equiualencie and conuerſion thereof, it is needfull firſt to declare the quantitie and qualitie of a modall propoſition: of both which things, though *Ariſtotle* maketh no mention, but only a little of qualitie; yet the latter Writers doe neceſſarily ſuppoſe modall propoſitions to bee indued with quantitie and qualitie: for they ſay that the mood *neceſſarie* is much like to a ſigne vniuerſall affirmatiue; the mood *impoſſible*, to a ſigne vniuerſall negatiue; the moods *poſſible* and *contingent*, which are both of one value, are like to ſignes particu-

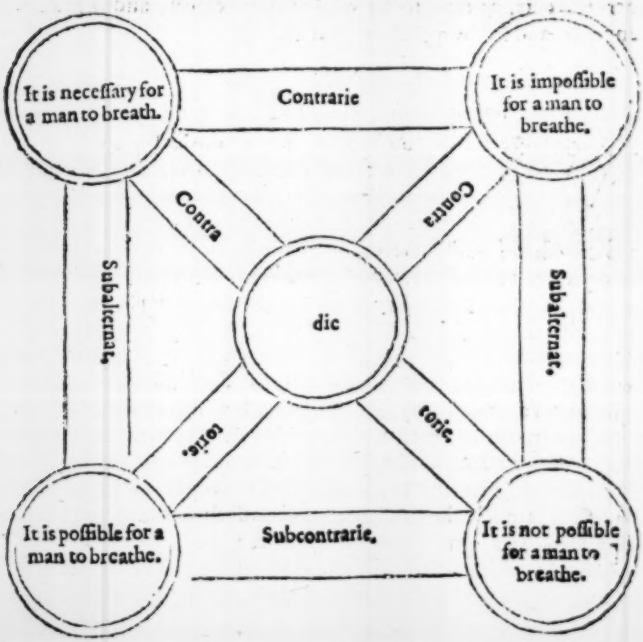
lar affirmatiue. Now as touching the qualitie, which is to be either affirmatiue, or negatiue, like as the negatiue in abſolute propoſitions is wont to bee added to the verbe, euen ſo in modall propoſitions it is added to the mood, as by the examples ſet down in the figure of oppoſition hereafter following ye may eaſily perceiue.

CHAP. VIII.

Of the oppoſition of Modals.

How many waies are modall propoſitions ſaid to be oppoſite?

They are ſaid to be oppoſite foure manner of waies, euen as abſolute propoſitions are, tha is to ſay, contrarily, ſubcontrarily, contradictoriy, and ſubalternately, as you ſee in this figure following, wherin the mood is ſet before in the place of the ſubiect, the better to ſhew the quantitie & qualitie of euery propoſition.



CHAP. IX.

Of the equiualencie and conuerſion of modall propoſitions.

THe Schoolemen doe affirme, that modall propoſitions are eaſily made equiualent, by reaſon that they may be vttered foure manner of waies, that is to ſay, two manner of waies affirmatiuely, and two manner of waies negatiuely. The firſt way affirmatiuely, is, when no negatiue is added either to the ſubiect, or to the mood; as, for a man to be iuſt, it is poſſible, contingent, impoſſible, or neceſſarie. The ſecond way affirmatiuely, is, when the negatiue is added to the verbe of the ſubiect, the mood remaining ſtill affirmatiue; as, for a man not to be iuſt, it is poſſible, contingent, &c. The firſt way negatiuely, is, when the negatiue is only added to the mood; as, a man to be iuſt, it is not poſſible, contingent, &c. The ſecond way negatiuely, is, when the negatiue is both added to the verbe of the ſubiect, and alſo to the mood; as, a man not to be iuſt, it is not poſſible, contingent, &c. which is all one and equiualent to this affirmatiue propoſition, ſaying, that for a man to be iuſt, it is poſſible, contingent, &c. for two negatiues, as well in the Latine tongue, as in ours, do alwaies make an affirmatiue. Again, as touching the cõuerſion of modal propoſitions, they ſay, that the diſiunct being like to an abſolute or ſimple propoſition, may be conuerted both ſimply and *per accidens*; but the coniunct ſuffereth no conuerſion: & though the Schoolemen do ſet down diuers & manifold rules, and haue inuented theſe 4. words of Art, that is, *PVRPVREA, ILIACE, AMABIMVS, EDENTVLI*, attributing as wel to the vowels, as to the conſonants thereof, certaine ſignifications, for the better vnderſtanding & bearing in memorie the equiualencies & conuerſions of the ſaid modal propoſitions: yet becauſe in mine opinion they are more meet to breed prepoſterous, intricate & barbarous ſpeeches, then to ſerue to any other good purpoſe, I thinke it better to paſſe them ouer with ſilence, then to trouble your memorie therwith: wherfore leauing them as things ſuperfluous, I minde now to treat of an hypotheticall or cõpound propoſition, & of al the neceſſarie accidents therunto belonging.

CHAP.

CHAP. X.

Of a compound or hypothetical propoſition.

What is a compound propoſition?

It is that which conſiſteth of two or more ſimple propoſitions, coupled together with ſome coniunction.

How manifold is it?

Threefold, Conditionall, Copulatiue, and Diſiunctiue.

When is it ſaid to be conditionall?

When the coniunction *If* is ſet before any ſimple propoſition, as thus: If it be a man, it is a ſenſible body.

When is it ſaid to be copulatiue?

When two ſimple propoſitions are ioined together with a coniunction copulatiue, as, God is true, and man is a lier.

When is it ſaid to be diſiunctiue?

When two ſimple propoſitions are ioined together with a coniunction diſiunctiue, as thus; Either it is day, or night.

Of how many parts doth a compound propoſition conſiſt?

Of two, that is, of the antecedent, and of the conſequent?

Which call you the antecedent?

That which followeth next after the coniunction, as thus: If it be iuſtice, it is a vertue: here this ſpeech, If it be iuſtice, is the antecedent, and the reſt of the ſpeech, that is to ſay, it is a vertue, is the conſequent: and ſo it ſhould be, though the words were contrarily placed, as thus: It is a vertue, if it be iuſtice.

What things are to be conſidered in hypotheticall propoſitions?

Theſe: Firſt, whether they haue any quantitie, or qualitie: then, whether any oppoſition, equiualence, or conuerſion doe belong to them, or not: thirdly, how to know the truth or falſhood of euery ſuch propoſition, be it conditionall, copulatiue, or diſiunctiue. And firſt, as touching quantitie, they haue none at all: for quantitie is to be meaſured by ſignes vniuerſall, or particular, which are only incident to the ſubiects of categoricall propoſitions: but qualitie they haue, in that they affirme or denie ſome thing, by reaſon whereof there may be contradiction in hypo-

hypotheticall propoſitions, but it cannot bee properly ſaid, that they be either contrarie, ſubcontrarie, or ſubalternat, for that they are without quantitie; for want whereof they neither doe aptly admit oppoſition, equiualence, or conuerſion, but onely contradiction.

How is that Contradiction to be vnderſtood?

By reaſon of affirmation, or negation; which, as in ſimple propoſitions is to be taken on the behalfe of the verbe copulatiue, and not of the ſubiect or predicate: ſo in compound propoſitions, it is to be taken on the behalfe of the coniunction, hauing a negatiue ſet before it; and yet not of euery coniunction, but onely of that coniunction conditionall, If: whereof I cannot aptly giue you any example in our natiue tongue, becauſe it is contrarie to our naturall and vſuall ſpeech, to put a negatiue before the coniunction, If; and therefore I leaue to ſpeake thereof any further: and to ſay the truth, it maketh but a ſtrange kinde of ſpeech in the Latine tongue, and I beleeue is ſeldome vſed in any diſputation: as to ſay thus, *Non ſi animal eſt, homo eſt*: or, *Non ſi lux eſt, dies eſt*: both which are ſaid to be negatiue ſpeeches, according to the rule before giuen, becauſe the negatiue is ſet before the coniunction *ſi*, and by vertue thereof (as the Schoolemen ſay) maketh the whole propoſition to be negatiue.

CHAP. XI.

Of the truth and falſhood of Hypotheticall propoſitions, and firſt, of the Conditionall.

What is to be conſidered, to know the truth or falſhood of Conditionall Propoſitions?

First, whether they be affirmatiue or negatiue: for in the affirmatiues it ſufficeth, that the one part doth neceſſarily follow of the other, as thus: If it be a man, it is a ſenſible body: and it maketh no matter, though the parts ſeuerally taken, be both falſe, ſo as the Conſequent be good: as, If a tree be a man, a tree is a ſenſible bodie: for though both theſe parts be falſe, yet the

Conſequent conditionally is true: for a conditionall Propoſition hath no regard to the truth of the parts, but onely that the Conſequent may neceſſarily follow of the Antecedent.

How is the truth of the negatiue Propoſition to be knowne?

By the Conſequent: for if the Conſequent bee not rightly inferred of the antecedent, then the negatiue is true, as thus: it followeth not that becauſe a Lyon is a ſenſible body, that therefore a Lyon is a man.

Of the truth and falſhood of propoſitions copulatiue.

When is a copulatiue Propoſition ſaid to be true or falſe?

It is ſaid to be true, when both the parts bee true, as when I ſay, God is true, and man is a lyar: againe it is ſaid to be falſe, when either one part or both parts be falſe: as when I ſay, man is a ſenſible bodie, and God is not a Spirit. Here becauſe the firſt part is true, and the ſecond part falſe, the whole Propoſition is ſaid to be falſe. It is ſaid alſo to be falſe, when both parts are falſe, as thus; Man is true, and God is a lyar. Heere both parts be falſe.

What kinde of propoſitions are wont to bee referred to this copulatiue?

Thoſe which they call Temporall, Locall, by ſimilitude and cauſall: as of time thus, When a penitent ſinner prayeth, then God heareth him. Of place thus, Where two or three are gathered together in the Name of the Lord, he is in the midſt of them. By ſimilitude thus, As a man dealeth with his neighbour, ſo will God deale with him. Of the cauſe thus, Becauſe the Sunne ſhineth, it is day. And therefore certaine Aduerbes as theſe, When, Where, Vntill, ſo long as, as, ſo as, for, therefore, becauſe and ſuch like, haue the ſignification ſometime of the Coniunction (And) and ſometime of the Coniunction (If).

Of the truth and falſhoode of diſiunctiues.

What belongeth properly to diſiunctiue Propoſitions?

To conſiſt of repugnant parts, according to the ſigni-

ſignification of Coniunctions diſiunctiue, ſuch as theſe bee, *vel* or eyther, or elſe, and ſuch like: as eyther it is day, or it is night, whereof the one deſtroyeth the other: for if the one be, the other can not be: and therefore they can not bee both true: but they may be both falſe, if there be any mean betwixt the two contraries: as when wee ſay, This woman is eyther white or blacke, both theſe are falſe, if ſhe be browne, which is a meane colour betwixt white and blacke. But the later writers affirme the diſiunctiue to bee true, if any one or both of the parts bee true, as thus, Eyther a man is a ſenſible body, or elſe a tree is a Subſtance: and to bee falſe when both parts bee falſe, as Eyther a man is true, or God is a lyar.

The end of the third Booke of Logicke.

THE ART OF *LOGICKE.*

THE FOVRTH BOOKE.

CHAP. I.

Of Places.

THough immediately after the Treatiſe of a Propoſition, the old men are wont to deale with the order of reaſoning, called Argumentation, and with the formes thereof: yet ſith by order of Nature it is meete to finde out matter, before wee goe about to forme, frame or order the ſame, and that the matter of proving any Queſtion is to be fetched from certaine common Places, I thought it beſt to treat firſt of thoſe Places, and then to ſhew the order of reaſoning.

What is a place?

A Place is a marke or token, ſhewing from whence any Argument apt to proue the Queſtion propounded, is to bee taken.

What difference is betwixt Argument and Argumentation?

Argument is the bare proofe or meane terme which is inuented by him that diſputeth, to proue the truth of the Queſtion: but Argumentation is the whole reaſoning it ſelfe, of what

forme ſo euer it be, comprehending both the Queſtion, and alſo the proofe thereof: whereof we ſhall ſpeake hereafter in his proper place, and giue you examples of both.

How manifold is Place?

Two-fold, the one of perſons, the other of things: the order and diſtribution of both which, you may plainly ſee in the Table following.

To what end ſerueth this manifold diuiſion?

That the diſputers may the more perfectly know the power and proper nature of euery Argument, according to the great or little force of the Place, from whence ſuch Arguments are fetched.

How is Place diuided according to the Schoolemen?

Into two kindes, the one called Maxim, and the other difference of Maxim.

What is Maxim?

It is a generall rule approued and receiued of all Logicians, in ſuch ſort as no man will deny the ſame, as of contrarie things there muſt needs bee contrarie conſequents. Againe, Whatſoeuer agreeth with the thing defined, agreeth alſo with the Definition of the ſame: and ſuch like.

What is the difference of Maxims?

It is the proper name of euery Place whereby one Maxim is known from another, and to what place euery Maxim belongeth, as from the Contrary, from the Definition, from the thing defined: for by theſe names and ſuch like, wee know to what Place euery Maxim belongeth.

To what end ſerueth this diuiſion?

The Maxims ſerue as ſhoote-ankers, and as places of refuge, when the aduerſarie ſhall deny our Concluſion: againe the differences being few in number, doe cauſe the multitude of Maxims to be the more eaſily kept in memory.

The

- Of Places, some be
  - Of Persons, as
    - Name, stocke, birth, nation, sex, or kinde, age, education, habite of the body, affections of the mind, state, calling, or condition of life, diet, study, or exercise, acts done, death, wonders chancing before death, or after death, monuments left of things done, or written, and kinde of Funerals shewing how well or euill the person was beloued.
  - and some be of things, which be, either
    - Artificiall Places are either
      - Inward Places be either
        - Of the substance it selfe, which be these.
          - The Definition, and the things defined.
          - The Description, & the thing described.
          - The Interpretation, and the thing interpreted.
          - The Matter, and the thing made.
          - The Forme, and the thing formed.
          - The general kind, & his speciall kinde.
          - The Difference and his propertie.
          - The whole, and his parts Integrall.
          - Principall, and not principall.
        - Or, of things accompanying Substance, as these
          - Generation, and the thing ingendred.
          - Corruption, and the thing corrupted.
          - Vse, Abuse.
          - Subiects.
          - Adiacents, and actions.
          - Apposition.
          - Common Accidents.
          - Signes and circumstances, as time, place, and meane, &c.
      - Outward Places bee these
        - The Cause Efficient, and his effect.
        - The End, and the thing ended.
        - The foure Opposites, as
          - Relatiues.
          - Contraries.
          - Priuatiues.
          - Contradictories.
        - Things diuers in kind, called in Latine, Disparata.
        - Comparison, as more or lesse.
        - Like, or vnlike.
        - Example and Comparison.
        - Also to Comparison may be added these places.
          - From the Comparatiue to the Superlatiue.
          - From the Positiue to the Cōparatiue.
          - From two Positiues to two Comparatiues.
          - From two Positiues to two Superlatiues, and contrariwise.
        - Proportion.
        - Changed proportion.
        - Disproportion.
        - Changed Disproportion.
        - Translation or Figuratiue speech.
      - Or meane places bee these three
        - Coniugates.
        - Cases.
        - Diuision.
    - or Inartificiall places, which be these sixe
      - Fore-iudgements.
      - Rumors.
      - Tormentes.
      - Wrytings.
      - Oath.
      - Witnesses.

All which six places are comprehended vnder the place of Authoritie, as you may see in the Table of Authoritie hereafter following, in which Table are set downe the said inartificiall places, together with the definitions and vses thereof.

CHAP:

CHAP. II.

Of the Places of Perſons.

Giue examples of all the Places of perſons.

Though the Places of perſons may bee very wel applyed to the place of common Accidents hereafter following, becauſe they eyther goe before, accompany, or follow the ſubiects wherevnto they doe belong: yet becauſe there is a difference betwixt perſons and things, and that the Places before mentioned in the Table of perſons, doe more properly belong to Perſons, then to things, I thought it beſt to giue you examples of euery Place belonging to the perſon, before I come to treate of the Places of things, and firſt of the name, then of the ſtocke and family, and ſo forth.

Of the name.

Of this Place you may reaſon eyther in praiſe or diſpraiſe more probably then truely, as to ſay thus: his name is *Goodman*: *Ergo* he ought to be a good man, for that name importeth good. I did once ſee an euill woman executed at Tyborne, whoſe name was *Sweepeſtake*, which name was anſwerable to her propertie, which was to ſweepe all her louers purſes ſo cleane as ſhe could. *Cicero* did not let to ſcoffe in like manner with *Verres* the Roman extortioner, againſt whom he made ſo many inueyghing Orations, ſaying many times, that he had not his name for nought: for *Verres* was as much to ſay as a ſweeping thiefe, deriued of the verbe *verro*, which in Engliſh is to ſweepe.

Of the ſtocke or birth.

Of this Place you may reaſon thus: Hee had ſtrong parents: *Ergo* he is ſtrong. Hee came of an euill race: *Ergo* it is no marueil though he be euill diſpoſed.

Of the nation.

He is of the Iland of *Crete* or *Candy*: *Ergo* he is a lyar. Hee is a Flemming, *Ergo* a drunkard. He is an Engliſhman: *Ergo* a glutton. He is an Italian: *Ergo* a diſſembler.

Of

Of the ſex or kinde.

It is the promiſe of a woman, *Ergo* not to be performed or truſted.

Of the age.

He is but an Infant, *Ergo* not malicious. He is young of age, and therefore to be pardoned.

Of education.

He was euill brought vp, and therefore can not be good.

Of the habit of the body.

He is bigge ſet, *Ergo* he is ſtrong. He is red headed, *Ergo* euill conditioned.

Of the affections of the minde.

He is giuen to exceſſe and ryot, *Ergo* he is not temperate or modeſt: to this place may be referred all manner of vertues and vices.

Of the ſtate, calling, or condition of life.

He is a bond man: *Ergo* he can neither ſue nor be ſued.

Of dyet.

He loueth to fare delicately, and to lie ſoft: *Ergo* hee is laſciuious.

Of ſtudie or exerciſe.

He is very ſtudious and applyeth his booke: *Ergo* no voluptuous man.

Of things done.

Pompey hath had many proſperous and noble victories: *Ergo* he is moſt meete to be ſent as General of the war againſt *Mythridates*.

Of death.

The death of *Scipio* was much lamented of the Romans, *Ergo* he was dearely beloued of the Romans. Such a one ſuffered death moſt conſtantly for Chriſts ſake, *Ergo* hee was a good Chriſtian.

Of things chancing after death.

Honourable Monuments were ſet vp by the people of *Rome* in the honour of *Iulius Cæſar* after his death, *ergo* he was honored and beloued of all the people of *Rome* in his life time. There were great earthquakes, and dead bodies did ariſe immediatly

after the death of Christ, *ergo* hee was the Sonne of God, and was vniustly condemned.

Chap. III.

Of the Places of things, and first of artificiall Places.

What be artificiall Places?

Artificiall Places are those wherein are contained such Arguments as of their owne force and nature are able to proue or disproue: which are diuided (as I said before) into inward, outward and meane Places.

What are inward Places?

Inward Places are those which yeeld Arguments either appertaining to the nature and substance of the matter in question, or else to such things as doe accompany the substance and nature of the thing.

Which be the Places of Substance?

These, Definition and the thing defined, together with the rest rehearsed before in the Table.

Of Definition and the thing defined.

What is Definition?

It is that which briefely, plainely and properly declareth the nature of any thing, by shewing the substantiall parts thereof.

How may a man reason from this place?

Both affirmatiuely and negatiuely, aswell from the Subiect as the Predicate of the Question. Affirmatiuely thus, Euery reasonable body is apt to learne letters, *Ergo* man is apt to learne letters. Negatiuely thus, No vnreasonable body is apt to learne letters, *Ergo* no brute beast is apt to learne letters.

What be the Maxims or generall rules of this Place?

The Maxims be these, Whatsoeuer agreeth with the definition, agreeth with the thing defined: and contrariwise whatsoeuer

ſoeuer agreeth not with the definition, agreeth not with the thing defined.

What is the thing defined?

That, whoſe nature and propertie is declared in the definition.

How may a man reaſon from this place?

Both affirmatiuely and negatiuely: affirmatiuely, as *Peter* is a man: *Ergo* he is a reaſonable body. Negatiuely, as an Ape is no man: *Ergo* an Ape is no reaſonable body.

What be the Maxims of this Place?

Whatſoeuer agreeth with the thing defined, agreeth alſo with the definition thereof: and whatſoeuer agreeth not with the thing defined, agreeth not with the definition of the ſame.

Of Deſcription, and the thing deſcribed.

WHat is Deſcription?

It is a ſpeech declaring what a thing is, by ſhewing the properties and accidents whereby it differeth from other things.

How may a man reaſon from this Place?

Both affirmatiuely and negatiuely: affirmatiuely thus, Euerie laudable habite adorneth his poſſeſſor: *Ergo* vertue adorneth his poſſeſſor: negatiuely thus, no laudable habite ſhameth his owner or poſſeſſor: *Ergo* no vertue ſhameth his owner or poſſeſſor.

What is the thing deſcribed?

It is that, whoſe properties either naturall or accidentall are declared in the deſcription.

How are arguments to be fetched from this Place?

Both affirmatiuely and negatiuely: affirmatiuely thus, This beaſt is foure footed, hauing long eares and whole feet: *ergo* it is an Aſſe: negatiuely thus; This foure footed beaſt hath no long eares nor whole feete: *Ergo* it is no Aſſe.

When are arguments to be confuted, being fetched frō theſe places?

When the definition or deſcription is not true or proper to the thing defined or deſcribed.

Of Interpretation and the thing interpreted.

WHat is *Interpretation*?

It is the declaring of a name leſſe knowne by another that is more knowne, as thus, Ieſus is as much to ſay as a Sauiour, a Philoſopher is a louer of wiſedome.

What is the thing interpreted?

That which is declared by the Interpretation, as this word Ieſus to be a Sauiour, or this word Philoſopher to bee a louer of wiſedome.

How may a man reaſon from this place?

Both affirmatiuely and negatiuely, if the tearmes bee conuertible. Affirmatiuely thus: He is a louer of wiſedome: *Ergo* a Philoſopher. Negatiuely thus: He is no louer of Wiſdome: *Ergo* no Philoſopher.

What be the maxims of theſe two places?

The Maxims of theſe Places are like, for whatſoeuer agreeeth with the one, agreeth with the other, and contrariwiſe.

Of the Place of Matter, and of the thing made.

WHat is *Matter*?

That whereof any thing is made, as Siluer is the matter of a Siluer Cup, and the Cup is the thing made, called of the Logicians *materiatum*.

How is Matter diuided?

Into Matter permanent, and Matter tranſient.

What is Matter permanent?

It is that which remaineth in the thing made, retaining ſtill both nature and name, as ſtone and timber is the matter of an houſe.

What is Matter tranſient?

It is that which being changed, doth not returne againe into his firſt nature: as flower and water being made bread, will neuer be flower and water againe.

How are arguments to be fetched from Matter permanent?

Both affirmatiuely and negatiuely: affirmatiuely thus, Here is timber, lime and ſtone: *Ergo* here may be an houſe: negatiue-

ly

ly thus, Here is neither timber, lime nor ſtone: *Ergo* here is no houſe.

How are arguments to be fetched from Matter tranſient?

Affirmatiuely, but not negatiuely, as heere is water and meale: *Ergo* here may be bread: but you can not ſay, here is no meale: *Ergo* here is no bread: for the matter permanent being taken away, the effect thereof is alſo taken away: but this Maxime taketh no place in matter tranſient, vnleſſe the Argument be made by the preterperfect Tenſe of time paſt, as thus: Here was no meale: *Ergo* here is no bread.

What be the Maxims of this Place?

The matter being ſet downe, the effect alſo may bee according to the difference of the matter.

How may we reaſon from the thing made to the matter?

In matter permanent you may reaſon from the preſent Tenſe to the preſent Tenſe, thus: Heere are iron weapons: *Ergo* heere is iron. But in matter tranſient wee muſt reaſon from the preſent time to the time paſt, thus; here is bread: *Ergo* heere hath been meale.

What be the Maxims of this Place?

The thing made of matter permanent being ſet downe, the matter alſo muſt needs be: and the thing made of matter tranſient being ſet downe, the matter therof muſt needs haue been.

How may you elſe reaſon from theſe two Places?

By adding theſe two adiectiues (good or euill) as thus: The houſe is good: *Ergo* the timber and ſtone was good: for the goodnes or defect of the matter permanent, ſheweth the preſent goodneſſe or defect of the thing made: and any good or euill thing made of Matter tranſient, proueth the Matter to haue been good or euill.

Of the Places of Forme and ſhape.

WHat is Forme?

Forme is that which giueth ſhape and being to the thing formed, whereof alſo the thing taketh his name, as the ſoule of man is the forme, and man is the thing formed.

How is Forme diuided?

Into { Forme ſubſtantiall, which is the firſt being or ſhape of any thing, and that is either { Mortall, as the ſoule of a bruite beaſt. / Or immortall, as the ſoule of man. } / And into Forme accidentall, which is a meere accident, called of the Logicians Abſtractum, as whiteneſſe or blackneſſe.

How are arguments to be fetched from the Forme and the thing formed?

Two waies, affirmatiuely from the ſubſtantiall forme, thus: Here is the ſoule of a beaſt: *Ergo* here is a beaſt: from the accidentall forme thus: Heere is whiteneſſe: *Ergo* here is ſome white thing: from the ſubſtantiall thing formed thus: The beaſt is here: *Ergo* his ſoule is heere: of the accidentall thing formed thus: Here is ſome white thing: *Ergo* heere is whiteneſſe: Negatiuely from the ſubſtantiall forme thus: Here is no ſoule of a beaſt: *Ergo* here is no beaſt: of the accidentall forme thus: Heere is no whitenes: *Ergo* heere is no white thing: of the ſubſtantiall thing formed thus: The beaſt is not here: *Ergo* his ſoule is not here: of the accidentall thing formed thus: Here is no white thing: *Ergo* here is no whitenes.

Rehearſe the Maxims whereupon theſe arguments are grounded.

The Maxims bee theſe, where Forme is either preſent or wanting, the thing formed alſo muſt needs be either preſent or wanting, and contrariwiſe. Yet this Maxim faileth in the ſorme of man, for the ſoule intellectiue may bee, and yet no man, vnleſſe you reaſon from the inbeing of the Forme in the Subiect, as, In the body is a reaſonable ſoule: *Ergo* it is a man: for euerie Subiect hath his name and being in his ſhape or forme, as hath been ſaid before.

Of the generall kinde.

What is generall kinde?

It is that which comprehendeth many things differing

ring in ſpeciall kinde, as hath beene ſaid before.

How are Arguments to be fetched from the generall kinde to the ſpeciall kinde?

Both affirmatiuely and negatiuely: affirmatiuely thus, Euery vertue is to be deſired: *Ergo* Iuſtice is to be deſired. Negatiuely thus, No vice is to be praiſed: *Ergo* drunkennes is not to be praiſed.

Rehearſe the Maxims belonging to the generall kinde?

To what kinde ſoeuer agreeth the generall kind being vniuerſally taken (that is to ſay) pronounced with ſome vniuerſall ſigne, as All, Euery or None, to the ſame the ſpeciall kind doth alſo agree: and whatſoeuer agreeth not with the generall kinde vniuerſally taken, agreeth not with the ſpeciall kind: for if no vniuerſall ſigne be added to the generall kinde, you cannot reaſon affirmatiuely, but onely negatiuely, thus: It is no ſenſible body: *Ergo* it is no man: but you cannot reaſon ſo affirmatiuely, as to ſay thus, It is a ſenſible body: *Ergo* it is a man: becauſe the vniuerſal ſigne All, or Euery, is wanting.

How many Places doth this Place of generall kinde comprehend?

Foure, (that is to ſay) All or euery in quantitie, All or euery in reſpect, All or euery in place, All or euery in time.

What is All or euery in quantitie?

It is when an vniuerſall ſigne is added to the generall kind, as euery plant liueth, therefore euery tree liueth.

When is it all or euery in reſpect?

When any generall kind is vnderſtood in ſome reſpect, and that the generall ſignification thereof is reſtrained by ſome word added vnto it, or by ſome ſecret meaning limiting the ſame, as a white beaſt, a good man: for this word white reſtraineth the general ſignification of beaſt, and this word good the generall ſignification of man.

Giue examples of this place.

God gaue his holy ſpirit to all faithfull men: *Ergo* to his Apoſtles.

What is all or euery in place?

It is when the generall kinde is an aduerbe of place, ſignifying euery where or no where, as Iuſtice is no where truly

truly executed: *Ergo* neither in *Fraunce* nor in *England*.

What is all or euery in time?

It is when the generall kinde is an aduerbe of time, ſignifying euer or neuer, as God is alwaies with vs: *Ergo* now at this preſent.

What maxims doe belong to theſe places?

The ſame that doe belong to the generall kinde vniuerſally taken before mentioned, by vertue whereof you may reaſon both affirmatiuely and negatiuely, as I ſaid before.

Of the ſpeciall kind.

How are arguments to be fetched from the ſpeciall kinde to the generall kinde?

Affirmatiuely, but negatiuely thus; It is a man: *Ergo* it is a ſenſible body. But now you cannot ſay, it it no man: *Ergo* it is no ſenſible body: for it may be a horſe, or ſome other ſenſible thing.

Woat be the maximes belonging to the ſpeciall kinde?

Where the ſpeciall kind is, there the generall kinde muſt alſo needs be: againe, all the ſpeciall kinds being taken away, the generall kinde is alſo taken away.

Of the place of Difference.

This place is comprehended vnder the place of definition, for difference is a good part of the definition, and yet for order ſake I haue thought good to place it next to the generall kinde and ſpeciall kinde before taught.

How may a man reaſon from this place?

Both affirmatiuely and negatiuely, as an Oyſter hath feeling: *Ergo* it is a ſenſible body, a horſe hath no reaſon: *Ergo* he is no man.

Woat be the maximes in this place?

Whatſoeuer agreeth with the ſpeciall difference, agreeth with the thing that hath that difference, and whatſoeuer diſagreeth with the ſpeciall difference, diſagreeth with the thing that hath that difference, for they be conuertible.

Of

Of the place of Propertie.

How may a man reaſon from this place?

This place is contained vnder the place of Deſcription before ſhewed. And from hence you may reaſon both affirmatiuely and negatiuely, as thus; He is apt to ſpeake: *Ergo* hee is a man; He is not apt to ſpeake: *Ergo* he is no man.

What be the maxims of this place?

Whatſoeuer agreeth with the propertie, agreeth alſo with the thing that hath that propertie. And whatſoeuer diſagreeth with the property, diſagreeth alſo with the thing whereto ſuch propertie belongeth, for they be conuertible.

Of the place of whole Integrall.

What is whole Integrall?

That which conſiſteth of parts hauing quantitie.

How may we reaſon from the whole to euery particular part?

Affirmatiuely, but not negatiuely, thus; It is a houſe: *Ergo* it hath foundation, walles and roofe: but you cannot reaſon ſo negatiuely from the whole to euery particular part, as to ſay thus; Here is an Houſe: *Ergo* here is no foundation or walles.

What be the maxims of this place?

If the whole be, euery principall part muſt needs be: but if the whole be wanting, ſome principal part muſt needs be wanting, though not all: for the houſe might be wanting, and yet the walles and foundation may ſtill remaine.

Of the place of Integrall parts.

What is an Integrall part, and how is it diuided?

It is that which certaine other parts make vp the whole, and ſuch Integrall part is either principall, or not principall.

Define theſe two parts?

The principall is that without the which the whole cannot be, as the head or belly of a liuing body, or as the foundation,

walles, or couering of an houſe. The part not principall is that without the which the whole may ſtand, as a houſe without dores or windowes: or the body may liue without hands or feete.

How may we reaſon from the principall part to the whole?

Negatiuely thus; Heere is no foundation or walles: *Ergo* here is no houſe: but you cannot reaſon ſo of the part not principall, but onely in hauing reſpect to the perfection of the whole, as thus; Heere is neither dores nor windowes: *Ergo* the houſe is not perfect.

What be the maxims of this place?

If any principall part be wanting, the whole cannot bee. If any part not principall be wanting, the whole is vnperfect.

Of the places of things accompanying Subſtance.

WHat is the place of things accompanying Subſtance?

It is that which comprehendeth ſuch arguments as are not fetched from the ſubſtance of the thing it ſelfe, but from that which accompanieth the ſubſtance thereof.

Which be thoſe places?

Theſe: Generation, the thing ingendred: Corruption, the thing corrupted: Vſe, Subiect, Adiacents, Actions, Oppoſition, common Accidents, and Circumſtances and ſuch like.

Of the place of Generation, and of the thing engendred.

WHat is Generation?

It is the firſt being or ſpringing of any thing.

How are arguments to be fetched from Generation to the thing engendred?

Affirmatiuely thus: It was good that Chriſt was borne: *Ergo* Chriſt was good; It was euill for *Rome* that *Catiline* was borne: *Ergo*, *Catiline* was euill to *Rome*.

What be the Maxims of this place?

Thoſe things whoſe generation is good, muſt needs bee good, and thoſe things whoſe generation is euill, muſt needes be euill.

How

How may we reaſon from the thing engendred to the Generation?

Affirmatiuely thus: *Catiline* was euill to *Rome*: *Ergo*, the birth of *Catiline* was euill to *Rome*.

What be the maxims of this place?

If the thing engendred be either good or euill, the generation thereof muſt needes be alſo either good or euill.

Of Corruption, and the thing Corrupted.

What is Corruption?

Corruption is contrary to Generation, and is the deſtruction of the thing engendred, and the thing deſtroyed is ſaid to be corrupted.

How may we reaſon from Corruption, to the thing Corrupted?

Thus: To execute theeues and murtherers, is profitable to the Common-wealth: *Ergo*, theeues and murtherers are hurtfull to the Common-wealth. The death of *Virgil* was a great loſſe to learning: *Ergo*, *Vir.* was a great furtherance to learning.

How may we reaſon from the thing Corrupted, to the Corruption?

Affirmatiuely thus: *Virgil* was a great furtherance to learning: *Ergo*, the death of *Virgil* was a great loſſe to learning.

What be the maxims of theſe two places?

Thoſe things whereof the end and deſtruction is laudable, muſt needs of themſelues be pernitious and hurtfull. And contrariwiſe, thoſe things whoſe ende and deſtruction is hurtfull, muſt needs of themſelues be good and profitable. Againe, of good things, the loſſe Is euill, and of euill things, the loſſe is good: but in reaſoning from theſe places, you muſt take heede that as well the Corruption, as the thing corrupted, bee abſolutely good, or euill of it ſelfe, and not by Accident: for it were no good argument to reaſon thus; The death of Chriſt was good: *Ergo*, Chriſt was euill: for his death was good by accident for our ſaluation, and not for any crime that was in him. Moreouer, you muſt beware that you vſe not one ſelf predicate both in your antecedent, & in your conſequent: for if good be the predicate in the antecedēt, euill muſt be the predicate in the conſequent, and if euil be the predicate in the antecedent, good

muſt be the predicate in the conſequent: for this kinde of reaſoning conſiſteth of contraries.

Of Vſe.

WHat is vſe?

Vſe is the apt applying of euery thing to his proper ende, as the vſe of wine to comfort the ſtomack, and to reioyce the heart of man.

How may we reaſon from this place?

Affirmatiuely thus: the vſe of wine is good: *Ergo*, wine is good: the vſe of art Magick is euill: *Ergo*, the art it ſelfe is euill.

What be the maxims of this place?

That thing is good or euill, whereof the vſe is good or euill.

What is to be obſerued in this kind of reaſoning?

Two things: firſt, that the thing whereof wee ſpeake, haue ſome good or euill vſe of it ſelfe abſolutely, and not by accident: ſecondly, that we take not the abuſe in ſtead of the right vſe, as to ſay, Wine will make men drunke: *Ergo*, wine is not good.

Whereto ſerue moſt chiefly theſe three places laſt mentioned (that is to ſay) the place of Generation, of Corruption, and of Vſe?

They chiefly ſerue to proue the naturall goodneſſe or euilneſſe of any thing.

Of the Subiect.

HOw is this word Subiect here taken?

For that whereunto accidents and actions do belong: and hauing to ſpeake here of common accidents, I thought it good to ſpeake firſt of the Subiects, becauſe all manner of Accidents muſt needes cleaue to one Subiect or other.

How may we reaſon from this place?

Affirmatiuely, and Negatiuely: Affirmatiuely thus; It is fire: *Ergo*, it is hot and apt to burne. He is a man: *Ergo*, apt to laugh or to weepe. Negatiuely thus, Dead men haue no being at all: *Ergo*, dead men are not miſerable. He hath no gall: *Ergo*, hee

cannot

cannot be angrie. There be no Pigmeans: *Ergo*, they fight not with Cranes.

Which be the Maxims of this place?

If the Subiect be, the naturall accidents and actions belonging to the Subiect muſt alſo needs be: and the Subiect being taken away, all the accidents and actions thereof muſt alſo be taken away.

How may ſuch arguments as are fetched out of this place be confuted;

When the Accidents doe not of neceſſity belong to the Subiect, as thus, He is a man: *Ergo*, he is a good Poet, for this accident belongeth not of neceſſitie to euery man.

Of Adiacents and Actions.

For ſo much as Adiacents, otherwiſe called perpetuall Accidents, and alſo naturall and proper Actions belonging to any Subiect be either contained vnder the place of Propertie, of Difference, or elſe of common Accidents, and haue like kind of reaſoning, I thought good therefore to referre you to thoſe places, whereof ſome are taught before, and ſome doe follow hereafter.

Of Appoſition.

What is Appoſition?

Appoſition is, when a thing ſheweth what his owne qualitie or operation is, by being put or added to another thing, as, white Chalke being put to a wall, will make the wall white, and thereby Chalke ſheweth it ſelfe to bee white: ſo likewiſe Inke being put to paper, or ſuch like thing, will make it black.

How may a man reaſon from this place?

Affirmatiuely thus: Chalke being put to a wall, will make it white: *Ergo*, Chalke is white. Fire being put vnder a Cauldron of water, will make the water hot: *Ergo*, fire is hot. By this place alſo a man may prooue conuerſation or company with others to be good or euill in this ſort. This young man

keeping company with that old man is made vertuous: *Ergo*, the old man is vertuous. Hee is become a theefe by keeping company with ſuch a perſon: *Ergo*, that perſon is a theefe. And therefore the Scripture ſaith, *cum bonis bonus eris, & cum peruerſis peruerteris* (that is to ſay) with the good thou ſhalt be good, and with the froward thou ſhalt learne frowardneſſe.

What bee the Maxims of this place?

If one thing being put to another, endueth the ſame with any quality, that thing muſt needes haue the ſame qualitie it ſelfe. I doe place this place next to action, becauſe it ſeemeth to me that it appertaineth to action.

Of common Accidents.

WHat call yee common Accidents?

I call thoſe common Accidents, ſuch things as are either alwaies, or for the moſt part ſo knit together, as the one goeth before or after the other, or els accompany each one the other: whereof ſome are neceſſarie, and ſome probable.

How may we reaſon from the Neceſſarie?

Both affirmatiuely and negatiuely, and firſt affirmatiuely, by the latter part thus. This Appletree hath flowers: *Ergo*, it hath budded. It hath fruit: *Ergo*, it hath both budded and flowred. This woman is brought to bed of a childe: *Ergo*, ſhe hath conceiued. Negatiuely by the former part thus. This woman neuer conceiued: *Ergo*, ſhe can bring forth no childe. This man neuer ſtudied: *Ergo* he is not learned.

What be the maxims of this place?

If the latter be, the former muſt needs goe before, and if the former were not, the latter cannot be.

Of Probable Accidents, Coniectures, Preſumptions, Signes, and Circumſtances.

HOw may we reaſon from Probable Accidents?

From Probable Accidents you may reaſon Affirmatiuely thus: The feaſt of *Bacchus* is this day celebrated: *Ergo*, there

there will bee many drunken this day. The generall Seſſions are holden this day: *Ergo*, there will be ſome hanged.

What be the maxims of this place?

If the latter be, it is likely that the former went before, and if the former bee, it is like enough the latter may follow: but you muſt beware in reaſoning from this place, that you fetch not your argument from ſuch Accidents as chance but ſeldome, or be indifferent, for ſuch be neither neceſſarie nor probable, but ſophiſticall and fallible, as to reaſon thus. Shee is a faire woman: *Ergo*, ſhe is vnchaſt.

Whereto ſerueth the place of common Accidents?

In the Iudiciall kinde it helpeth greatly to proue the fact. In the Demonſtratiue kinde to praiſe or diſpraiſe. In the Deliberatiue kinde to perſwade or diſſwade, and to gather together all Coniectures meete for the purpoſe, and therefore this place is much vſed of natural Philoſophers to proue things by naturall ſignes, or by Phyſiognomie: alſo of Aſtrologers to proue dearth, mortalitie, and ſuch like, by wonders, and monſters, as by blazing ſtarres, and ſuch like impreſſions. Alſo it is much vſed of Chiromancers, Southſayers, and ſuch as vſe to iudge by Coniectures, and therefore this place extendeth very farre, and ſerueth to many vſes. Hitherto alſo are referred the places of circumſtances, and chiefely of time and place, from whence good arguments may be fetched.

Of Time.

HOw are arguments fetched from time?

Negatiuely thus: *Pythag.* was not borne in *Numa Pompilius* time: *Ergo*, *Numa* was not *Pythagoras* ſcholler. The ceremoniall lawes of *Moſes* were made for a certaine time: *Ergo*, after that time they doe not bind.

What be the Maxims of this place?

Nothing can bee without time, for if time bee taken away, the thing alſo muſt needs faile.

Of

Of Place.

How are arguments fetched from place?

Negatiuely thus: *Cicero* was not at *Rome*, when *Iulius Cæſar* was ſlaine: *Ergo*, *Cicero* ſlew him not.

What is the maxime of this place?

No certain body or thing is without a place, neither is one bodie at one time in diuers places: and thus much touching inward places.

Of outward Places, and firſt of Cauſes.

VVHich be outward Places?

Outward places bee thoſe which appertaine to the thing, and yet doe not cleaue thereunto: of which places the firſt is of Cauſes and Effects.

What is a Cauſe?

A Cauſe is that by vertue wherof another thing followeth.

How many chiefe kindes of Cauſes be there?

Foure, (that is to ſay) the Cauſe Efficient, the end, matter, and ſhape, of the two laſt whereof we haue ſpoken before, becauſe they be inward places, and doe belong to the Subſtance of the thing, and therefore we haue to deale onely here, with the cauſe Efficient and end.

Of the Cauſe Efficient.

VVHat is that cauſe Efficient, and how is it deuided?

Cauſe Efficient is that from whence proceedeth the firſt beginning of any thing that is made or done, and is the maker thereof. As for example, the Carpenter is the Cauſe Efficient of the houſe which he maketh, and ſo is euery Artificer of his owne worke. Cauſes Efficient are deuided into two kinds (that is to ſay) Cauſe Abſolute, and Cauſe Adiuuant. Cauſe Abſolute worketh by his owne force and vertue, as the fire that burneth. Cauſe Adiuuant worketh not by himſelfe, but is a helper, and ſuch cauſe is ſometime principall, as vertue

tue is a Principall Cauſe of bleſſed life, and ſometime not Principal, as the gifts of the body and of fortune be helpers to the happy life: but not Principall Cauſes thereof. Againe of Cauſes, ſome are of Neceſſitie, without which the thing cannot be made, as the Inſtrument or matter, and ſome are ſaid not to be of Neceſſitie, as when we ſay, The ſpeaking of truth cauſeth hatred, and yet not of Neceſſitie. Alſo of Cauſes Efficient, ſome be Vniuerſall, and ſome Particular, as the Eclipſe or euill Coniunction of certaine Planets is the Vniuerſal cauſe of Peſtilence: but the corruption of humours in mans body is the particular cauſe thereof. Againe, of cauſes ſome bee called of the Latins *Propinquæ* (that is to ſay) nigh vnto the Effect, as the father and mother be the nigheſt Cauſes of Generation of Children. And ſome be called *Remotæ*, (that is to ſay) remoued cauſes, which be further of, as the Grandſirs, and Grandames of the ſaid children. Moreouer of Cauſes Efficient ſome work by a certaine naturall Neceſſity, as thoſe that lack choiſe and iudgement, as fire that burneth, and the Sun that ſhineth, and all other naturall things that doe work by their own force and vertue. Some againe do work by counſell, reaſon, and free-will, as men, Angels, and moſt chiefely God himſelfe.

How may we reaſon from the Efficient Cauſe to the Effect?

From the neceſſarie Efficient Cauſe you may reaſon both Affirmatiuely and Negatiuely. Affirmatiuely thus: The Sun is lately gone downe: *Ergo*, it is twilight. Negatiuely thus: The Sunne was not vp when *Troy* was deſtroyed: *Ergo*, *Troy* was not deſtroyed in the day time: but from the Efficient not Neceſſarie, you can reaſon but onely Affirmatiuely thus: He is ſlaine: *Ergo*, he is dead: but you cannot ſay; he is not ſlaine: *Ergo*, he is not dead.

What be the maxims of this Place?

The Neceſſarie Cauſe Efficient not letted, the Effect muſt needs follow: as if he hath drunken poiſon, he muſt needs die. But if ſuch Cauſe faileth, the effect alſo muſt needs faile: as the Sunne is not vp: *Ergo*, it is not day. He neuer ſtudied: *Ergo*, he is not learned, to which place may be referred the places of occaſion, Inſtrument, Meane, and Generation.

How may we reaſon from the Effect, to the Cauſe Efficient?

From the Neceſſarie Effect, both Affirmatiuely and Negatiuely thus, it is day: *Ergo*, the Sun is vp, it is not day: *Ergo*, the Sunne is not vp. From the Effect not Neceſſarie you may only reaſon Negatiuely, thus: He is not dead: *Ergo*, He is not ſlaine, but you cannot reaſon ſo Affirmatiuely, as to ſay, He is dead: *Ergo*, He is ſlaine.

What be the Maximes of this place?

The Effect being put, the neceſſary Cauſe muſt needes be, and the Effect being taken away, the neceſſary Cauſe is alſo taken away.

When doe Arguments fetched from this place faile?

When the Cauſe is not neceſſary or proper.

Of the End.

WHat is End, and how is it diuided?

The End is that for whoſe ſake any thing is done, and of ends ſome be chiefe and laſt, and ſome not chiefe, but helping: The chiefe is that which is deſired for it ſelfe ſake, and ſuch is the beſt ſtate of euery thing in his kinde, as bleſſed life to Man: courage and fierceneſſe to a Horſe of ſeruice: heate and dryneſſe to Fire: coldneſſe and moiſtneſſe to Water, &c. The helping end is that which is deſired not for it ſelfe ſake, but for that it helpeth to attayne the chiefeſt end, and of ſuch helping ends one may be better then another, as when we deſire money to buy a houſe, and the houſe to dwell in, &c.

How may we reaſon from this place?

Both Affirmatiuely and Negatiuely, affirmatiuely thus, Vertue is good, becauſe bleſſed Life is good: negatiuely thus, If Adulterie be not good to allure another mans wife, To breake wedlock is not good.

What be the Maximes of this place?

That thing whereof the end is good or euill, is alſo of it ſelfe good or euill.

Tell the vſe of theſe places of Cauſes, and whereto they ſerue?

The vſe thereof is diuers and manifold: for ſith that in the

De-

Deliberatiue kinde two principall queſtions are to be diſcuſſed; firſt, whether the thing be profitable; and ſecondly, whether it may be poſſible and conueniently done or not. Arguments to proue the firſt, are to be fetched out of the End and Effect. And to proue the ſecond out of the Cauſe Efficient. Alſo in the kinde Demonſtratiue to praiſe or diſpraiſe. Arguments are to be fetched out of the End and Effect. Thirdly, in the Iudiciall kinde, wherein doubt riſeth of the fact, and will of the doer. Arguments are to be fetched from the End, to proue or diſproue the ſame. Finally, theſe places, together with the other two Cauſes, Matter and Forme before taught, doe ſerue to make thoſe kindes of Definitions which we cal Cauſall.

Of Oppoſites.

WHat be Oppoſites?

Things contrary one to another.

How many kindes of Oppoſites be there?

Foure (that is to ſay) Relatiues, Contraries, Priuatiues, and Contradictories.

And firſt of Relatiues.

WHen are things ſaid to be Oppoſites by Relation?

When according to their owne ſignifications they haue mutuall Relation one to another, as the Father and the Sonne.

How may we reaſon from this place?

You may reaſon from the Affirmation of the one to the denyall of the other, thus ❧ *Auguſtus* was *Octauius* his ſonne: *Ergo*, He was not his Father.

What be the Maximes of this place?

Sith Relatiues be alwayes together by nature, if the one be, the other muſt needes be, and if the one be taken away, the other is alſo taken away.

What is to be obſerued in fetching Arguments from this place?

You muſt beware that you haue one ſelfe reſpect, and not diuers, for to reaſon thus is no good Conſequent, This man is

a Father: *Ergo*, He is no Sonne: or thus, This man is his Superior: *Ergo*, Not his Inferior, for in diuers reſpects he may be both a Father and a Sonne; a Superior and Inferior; a Superior in one reſpect, and Inferior in another.

Of Contraries.

WHat be Contraries, and how are they diuided?

They be two Extremes Repugnant one to another, whereof ſome are called Mediate (that is to ſay) hauing a meane, and ſome Immediate hauing no meane at all.

How may we reaſon from theſe two kindes?

From the firſt kinde you may conclude negatiuely, thus, He is prodigall: *Ergo*, He is not couetous: from the ſecond kinde you may reaſon both Affirmatiuely & Negatiuely, thus, This man is whole: *Ergo*, He is not ſicke; This man is not whole: *Ergo*, He is ſicke.

What be the Maximes of this place?

The Maxime of the Affirmatiue to the Negatiue is the generall Maxime to all Oppoſites, thus: Whatſoeuer agreeth with the one Oppoſite, muſt needes diſagree with the other Oppoſite: but the Maxime of the Immediate is thus: If one of the Contraries Immediate be not, the other muſt needes be, as the former examples doe plainely ſhew.

Of Priuatiues.

WHat be Priuatiues?

Priuatiues are two Contraries, belonging to one ſelfe Subiect, apt to receiue the ſame, in the which Subiect, when the one is wanting (at ſuch time as Nature doth appoint) the other muſt needes be.

How may we reaſon from this place?

Two wayes: firſt, from Affirmation of the one to the denyall of the other, which is common to all Oppoſites, as thus, He is blind: *Ergo*, He ſeeth not. Secondly, you may reaſon from the denyall of the one to the affirmation of the other, thus: He cannot ſpeake: *Ergo*, He is dumbe. But this kinde of Argument is not ſtrong, vnleſſe the thing required be applyed to

his

his proper Subiect, and in ſuch time as nature hath appointed, for it were no good argument to ſay thus: a ſucking child cannot ſpeake: *Ergo*, he is dumbe; or thus, a whelpe of two daies old cannot ſee: *Ergo*, he is blinde: for nature commonly ſuffereth not the childe to ſpeake before it be two yeeres old, nor the whelpe to ſee before it be nine daies olde.

What be the maxims of this place?

If the one bee not in the Subiect apt to receiue the ſame at ſuch time as nature hath appointed, the other muſt needs be.

Of Contradictories.

WHat be Contradictories?

They be Contraries hauing no meane, whereof the one denieth the other.

How may we reaſon from this place?

Both Affirmatiuely and Negatiuely thus: he is wiſe: *Ergo*, he is no foole: he is a foole: *Ergo*, he is not wiſe.

What is the Maxime of this place?

If the one be, the other cannot be: for two Contradictories cannot be together at one ſelfe time, in one ſelfe Subiect, and in one ſelfe reſpect.

Of things differing in kinde, called of the Latines Diſparata.

WHat be they?

They are thoſe things that doe differ in nature and kinde, as a Man, a Horſe, a Stone, a Tree, whereof euery one differeth from another in kinde and nature.

How may we reaſon from this place?

From the Affirmation of the one, to the Deniall of the other, as thus: *Peter* is a Man, *Ergo*, he is no Horſe.

What be the Maximes of this place?

Whatſoeuer agreeth with the one, agreeth not with the other.

What is to be obſerued in reaſoning from all theſe kindes of Oppoſites?

That the Repugnancy conſiſt in the Predicat, and not in the

Subiect: for it were no good Conſequent to ſay thus: whatſoeuer ſeeth is a ſenſible bodie: *Ergo*, that which is blinde is no ſenſible bodie: for heere the Contrarietie conſiſteth in the Subiect, and not in the Predicate.

Of Compariſon.

HOw may we reaſon from the place of Compariſon?

Three manner of wayes, that is, eyther from the More to the Leſſe, or from the Leſſe to the More, or from Like to Like.

Of the More.

THeſe two words, More or leſſe, how are they to be taken?

We vnderſtand heere by More, that which hath more probabilitie, and by the Leſſe, that which hath leſſe probabilitie.

How may we reaſon from the More to the Leſſe?

Onely Negatiuely, and that three manner of wayes: firſt, from the Subiect, as thus: *Cicero* was not able to defend this cauſe, much leſſe any other common Orator: ſecondly, from the Predicate thus: If this man be not able to beare one hundred weight, much leſſe two hundred weight: thirdly, from the Subiect, and Predicate both together thus: A ſtrong man is not able to beare a hundred weight: *Ergo*, much leſſe a weake childe is able to beare two hundred weight.

What is the Maxime of this place?

If it preuaileth not in the More, it cannot preuaile in the Leſſe.

Of the Leſſe.

HOw may we reaſon from the Leſſe to the More?

Affirmatiuely, three manner of wayes, as before from the Subiect thus: A little childe was able to beare ten pound weight: *Ergo*, much more a ſtrong man: From the Predicate thus: If Martyrs were readie to loſe their liues for Chriſts ſake, much more their temporall goods: From the Subiect, and the Predicate both together thus: Chriſt ſuffered moſt

grieuous

grieuous torments for our ſakes: *Ergo*, wee ought to ſuffer a little paine for his ſake.

What is the Maxime of this place?

If the Leſſe preuaile, the More muſt needs auaile.

What is to be obſerued in reaſoning from theſe two places?

You muſt beware that you take not the More for the Leſſe, nor the Leſſe for the More, for many times that which ſeemeth to be the More in number or quantitie, is the Leſſe in purpoſe, and contrariwiſe, as for example: to beare a hundred weight, is more in quantitie, then to beare halfe a hundred weight, and yet in purpoſe it is leſſe, for it is leſſe probable, and leſſe likely to beare a hundred weight, then to beare halfe a hundred weight.

Of Like and Vnlike.

How may we reaſon from Like to Like?

When the thing which we bring to proue, is like or equall to the thing that is to be proued: from which place wee may reaſon both Affirmatiuely and Negatiuely, thus: *Peter* is mortall: *Ergo*, *Paul* is mortall. The day Labourer is worthy of his hyre: *Ergo*, the Preacher or Teacher: A man ought to be drowned in the ſea for killing his Father: *Ergo*, he ought to be executed with the like death for killing his Mother.

What is the Maxime of this place?

Of things like, like iudgement is to be made: but note that this kinde of reaſoning of Like, is more apt to teach and to print in the hearers minde a liuely repreſentation of the thing, then to vrge him by any neceſſitie of due proofe to beleeue the ſame, becauſe it is vnpoſſible, that the two things which are to be compared can be like in all points, and therefore this is the weakeſt kinde of argument that is, and yet neceſſarie to ſuch end as is before declared, and ſpecially for Lawyers, to proue one ruled caſe, or for iudgement by another Like. To this place alſo is referred the place of Example.

Of Example.

How may we reaſon from this place?

Affirma-

Affirmatiuely thus: *Peter* ſlew *Ananias* for lying: *Ergo*, without all doubt God will puniſh thoſe that vſe to lye: the Maxime whereof is all one, with that of like before ſet downe.

Of Vnlike.

How may we reaſon from this place?

Negatiuely thus: God is not as man is, for man is a lyer: *Ergo*, God is true and no lyer.

What is the Maxime of this place?

Of things Vnlike, vnlike iudgement is to be made.

Of the degrees of Compariſon.

To the place of Compariſon, me thinkes it were not amiſſe to referre all thoſe places which Ariſtotle *reciteth, and are taken out of the three degrees of Compariſon, which children learne in their Accidents, (that is to ſay) the Poſitiue, the Comparatiue, and the Superlatiue.*

From the Comparatiue to the Poſitiues.

How may we reaſon from the Comparatiue to the Poſitiue?

Affirmatiuely thus: *Virgil* was a more learned Poet then *Horace*: Ergo, *Virgil* was a learned Poet: Honey is ſweeter then Milke: *Ergo*, Honey is ſweete.

What is the Maxime of this place?

If the Comparatiue degree be truly and properly applyed to any thing: the Poſitiue muſt needes be alſo rightly applyed to the ſame. I ſay, heere properly to auoid Ambiguitie, for it were no good Conſequent to ſay thus: the ſea of *Caſpia* is more ſweete then any other ſea: *Ergo*, it is ſweete and not ſalt: for this word Sweet hath not in this ſpeech his proper ſignification, but is rather taken, for that which is leſſe bitter or ſalt.

From the Poſitiue to the Comparatiue.

How may we reaſon from the Poſitiue to the Comparatiue?

Onely Negatiuely thus: *Zoilus* was no learned Poet: *Ergo*, he was not better learned then *Homer*.

What is the Maxime of this place?

If

If the Poſitiue be denied, the Comparatiue alſo muſt needs be denied.

From two Poſitiues to two Comparatiues and two Superlatiues.

HOw may we reaſon from two Poſitiues, to two Comparatiues, and to two Superlatiues at once, and contrarily?

In this manner: that which is good, deſerueth iuſtly to bee beloued: *Ergo*, that which is better, ought more iuſtly to bee beloued, and that which is beſt, ought moſt iuſtly to be beloued. And much after this manner you may reaſon from a double Comparatiue, to a double Poſitiue thus: that which is more honeſt; is more laudable: *Ergo*, that which is honeſt is laudable.

What is to be obſerued in reaſoning from theſe degrees of Compariſon?

You muſt take heed that the Predicate bee ſpoken of the Subiect naturally and neceſſarily, and not by Accident, for it were no good Conſequent to reaſon thus: he that is learned, is honeſt, therefore he that is more learned, is more honeſt: for a man may haue much learning, and yet ſmall honeſtie.

Of Proportion.

WHen are we ſaid to reaſon from the place of Proportion?

When two like Propoſitions being compared together, we conclude in this or ſuch like manner: looke what proportion is betwixt 6. and 4. the ſame proportion is betwixt 12. and 8. but betwixt 6. and 4. is *Proportio Seſquialtera*: *Ergo*, betwixt 12. and 8. the like proportion is: for when one number or meaſure doth comprehend another once, and one halfe thereof, that is called *proportio ſeſquialtera*, as 12. and 8. and if it containe it once, and one third part thereof, then it is called *proportio ſeſquitertia*, as 8. and 6. for 8. containeth 6. once and two ouer, which is the third part of 6.

What is the Maxime of this place?

Of things hauing like proportion, like iudgement is to be made.

Whereto ſerueth this place?

This place is neceſſary for Iudges and Magiſtrates that haue to conſider of equitie in caſes of Iuſtice, and in rewarding vertue, or in puniſhing vice, in which the Geometricall proportion would be alwayes vſed. Some doe giue ſuch examples of this place, as in my opinion doe rather belong to the place of Like then to this place, for the arguments of this place ought properly to be fetched out of the Predicament of quantitie, and not out of qualitie, or out of any other Predicament.

Of Changed Proportion.

WHat is changed Proportion?

Changed Proportion is when the Foundations, and Termes of two like Proportions are anſwerable in proportion aſwell amongſt themſelues, as one to another.

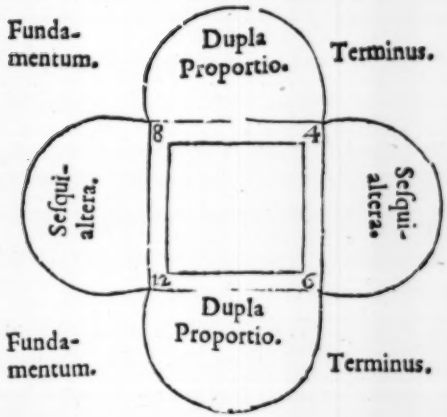
What meane you by theſe two words, Foundation and Termes?

The Foundation is that from whence the Compariſon firſt proceedeth, as the Father, and the Terme, Bound or end is that whereunto the ſaid Compariſon is applyed, and endeth in the ſame, as the Sonne and therefore the Son is called the Terme, Bound or end: whereof wee haue ſpoken before in the Predicament of Relation.

Giue Examples of reaſoning from this place.

Looke as 8. is to 4. ſo is 12. to 6. (that is to ſay) in double proportion one to the other: *Ergo*, as 12. is to 8. ſo is 6. to 4. for each other containeth the other once and a halfe, which is called *proportio ſeſquialtera*. The manifeſt Demonſtration whereof you may ſee in this Figure heere following.

Funda-



Why is this Proportion ſaid to be changed or tranſpoſed?

Becauſe the order of numbers that are compared, is altered in the concluſion: for in the Antecedent the firſt is compared to the ſecond, and the third to the fourth: but in the Concluſion the third is compared to the firſt, and the fourth to the ſecond.

Of Diſproportion.

HOw may we reaſon from this place?

Negatiuely thus: 12. is not to 6. as 8. to 6. but 12. to 6. is double in proportion: *Ergo*, 8. to 6. is not double in proportion.

What is the Maxime of this place?

Of things hauing vnlike proportion, vnlike iudgement is to be made.

From Diſproportion changed or tranſpoſed.

HOw may we reaſon from this place?

Negatiuely thus: 12. is not to 6. as 4. to 3. for betwixt the two firſt is a double proportion, and betwixt the two laſt *Seſquitertia*: *Ergo*, 12. is not to 4. as 6. to 3. for the

one is a *tripla*, and the other double.

What be the Maximes of this place?

If the firſt bee not to the ſecond, as the third to the fourth, then the firſt ſhall not be to the third, as the ſecond is to the fourth.

To whom are theſe places moſt familiar?

To thoſe that are exerciſed in the Mathematicall Sciences.

Of Tranſlation.

What is Tranſlation?

Tranſlation, otherwiſe called a Metaphor, is a figure of ſpeech, whereby the proper ſignification of a word is changed into another vnproper, for ſome likeneſſe that is betwixt the thing ſignified, and being generally taken, it is rather a Trope, or Figure of Rhetorick, more meete to adorne ſpeech, then to proue any thing thereby: notwithſtanding being taken heere as a place of Logick, you may reaſon both Affirmatiuely and Negatiuely, in this ſort: A roring Lion that ſeeketh to deuoure, is to be feared: *Ergo*, the Diuell is to be feared: Loue is blinde: *Ergo*, they that be in loue, are not able rightly to iudge.

What be the Maximes of this place?

Whatſoeuer agreeth with the Metaphoricall name, agreeth alſo with the proper name, and contrariwiſe.

Of Meane places.

What be meane Places?

Meane Places are thoſe from whence ſuch Arguments are to be fetched, as doe partly agree with the nature of the things to be proued, and doe partly differ from the ſame.

How are Meane Places diuided?

Into Coniugates, Caſes, and Diuiſion.

And firſt of Coniugates and Caſes.

What be Coniugates or Caſes?

Coniugates or Caſes, be like words deriued all of one ſelfe word, differing onely in termination or end, as wiſdome, wiſe, and wiſely: notwithſtanding ſome vſe Coniugates and Caſes as ſeuerall places.

Way,

Why, wherein doe they differ?

Their Difference is very ſmall, ſauing that in Arguments fetched from Coniugates, the Abſtract is mentioned, but not in thoſe that are fetched from Caſes.

How may we reaſon from theſe two places?

Both affirmatiuely and Negatiuely, from the Coniugates thus: A iuſt man is to be praiſed, *ergo* Iuſtice is to be praiſed: a vicious man is not to be praiſed, *ergo* viciouſneſſe is not to be praiſed. From caſes thus: He doth all things wiſely, *ergo* he is wiſe: He doth nothing wiſely, *ergo* he is not wiſe: for in theſe two laſt examples the abſtract which is wiſedome, is not once mentioned: what abſtract is, looke before in the Chapter of predication *lib.*1.*cap.*5. but you muſt beware in reaſoning from this place, that your phraſe of ſpeach be natural and proper, and not vnproper: for it were no good argument to ſay thus: white is ſweete: *Ergo*, whiteneſſe is ſweetneſſe.

What is the maxim of theſe two places?

Whatſoeuer agreeth with one of the Coniugates or caſes, muſt needes alſo agree with the other.

Of Diuiſion.

WHat is Diuiſion?

What Diuiſion is, and how many kindes there be, and what is to be obſerued in euery kinde hath been declared before, *lib.*2.*cap.*4. when we ſhewed the order of defining and diuiding.

How may we reaſon from diuiſion?

Two manner of wayes: firſt, from the denying of one part or more of the diuiſion, to affirme another part therof, as thus: Euery ſenſible body is whole or ſicke, but *Peter* is a ſenſible body and not ſicke: *Ergo*, hee is whole: or thus. Of ſenſible bodies there be ſome whole, ſome ſicke. *Peter* is a ſenſible bodie and not ſicke: *Ergo*, he is whole. In theſe two kindes of examples the diuiſion conſiſteth onely of two parts, wherein it ſufficeth to denie the one for affirming the other. But if the diuiſion conſiſt of many parts, then you muſt denie all the parts ſauing that which you would affirme, as in this example following:

lowing: *Plato* diſputeth, is a propoſition, but it is neither vniuerſall, particular, nor indefinite: *Ergo*, it is a ſingular propoſition: in which kind of reaſoning if you leaue out or omit any part that is to be denied, then the concluſion is naught, for it is no good conſequent to ſay thus: this propoſition *Plato* diſputeth, is neither vniuerſal nor particular: *Ergo*, it is indefinite. Notwithſtanding, if you ioyne the part omitted in your Antecedent with a coniunction diſiunctiue, the argument may be made good; as to ſay thus: this propoſition *Plato* diſputeth, is neither vniuerſall nor particular: *Ergo*, it is either indefinite or ſingular.

What is the Maxim of this firſt way of reaſoning?

The Maxim is thus: whatſouer agreeth with the thing diuided, muſt needs agree with ſome one of the parts thereof.

What is the ſecond way of reaſoning from Diuiſion?

The ſecond way is to proceede from the affirming of one of the parts to the denying of the other, if it conſiſt but of two, or to the denying of all the reſt, if it conſiſt of many. Of two parts let this bee your example: Of ſenſible bodies ſome bee whole, ſome ſicke, but this ſenſible body is whole: *Ergo*, he is not ſicke. Of many parts thus: of propoſitions one is vniuerſall, another particular; one indefinite, another ſingular: but this propoſition *Plato* diſputeth, is ſingular: *Ergo*, it is neither vniuerſall, particular, nor indefinite.

What is the Maxim of this way of reaſoning?

Whatſoeuer agreeth with one of the parts, muſt needs diſagree with all the reſt, for euery good diuiſion would be made of parts meere repugnant, or at the leaſt diuers in kinde one from another: for it is a principall condition requiſite to diuiſion, whereupon the ſecond way of reaſoning is grounded euen as the firſt way is grounded vpon another good condition belonging alſo to diuiſion, which is that the thing diuided may not containe more or leſſe then his proper parts.

Of inartificiall places.

HAuing ſufficiently ſpoken of places, inward, outward, and meane, which as I ſaid before are places artificiall, it is

is meet now that we ſpeake of the places inartificiall, which according to *Quintilian* be theſe ſixe; Foreiudgements, Rumors, Torture, Writings or Euidences, Oath, and Witneſſes: All which are briefly and plainely ſet forth in the Table of Authoritie here following, becauſe they are all contained vnder the place of Authority.

Of Authoritie.

How is Authority here to be taken?

Authoritie is here to be taken for any teſtimony worthy of credite.

How may we reaſon from this place?

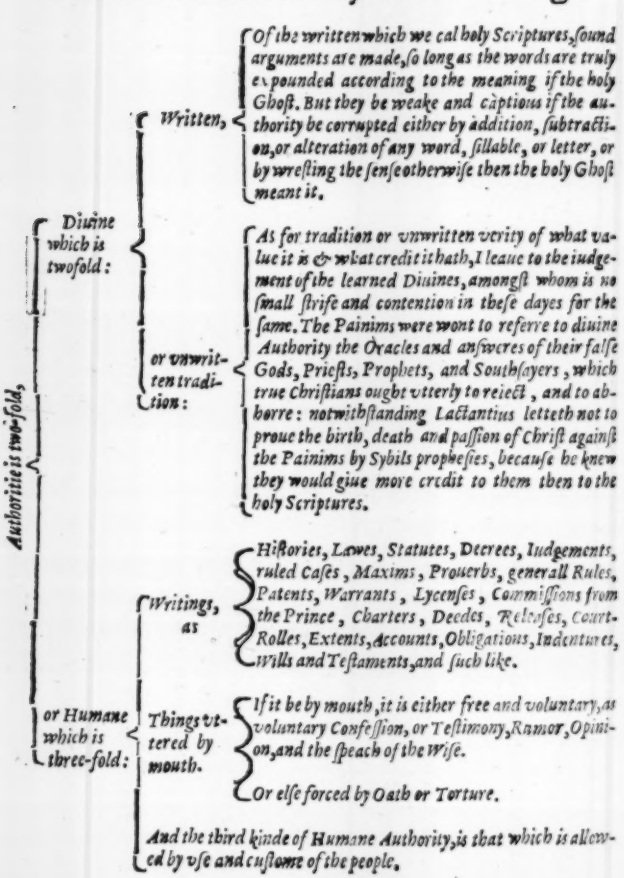
Affirmatiuely thus: the learned Philoſophers ſay that there bee foure elements, whereof all other things are mixt and compounded: *Ergo*, it is true. Chriſt ſaith that whoſoeuer is baptized, and beleeueth in him, ſhall be ſaued: *Ergo*, it is true.

What be the Maxims of this place?

Whatſoeuer is allowed by the moſt part of the wiſe and learned, is to bee beleeued as a thing probable, neither ought we raſhly to diſcent from their opinion and iudgement. Againe, euery man is to be beleeued in his owne Art: but for ſo much as Authority is two-fold (that is to ſay) diuine and humane, and that all arguments fetched from this place be not of like value, for ſome be true and infallible, ſome probable, and ſome Sophiſticall: this Table therefore here following ſhall plainely ſet foorth euery kinde by it ſelfe, whereby you ſhall eaſily diſcerne the one from the other.

The

The Table of Authority here following.



As

As for ſuch Arguments as are fetched from humane Authoritie, the lawes doe teach at large, which bee ſound, and which bee weake: notwithſtanding, for ſo much as *Quintilian* affirmeth, that the inartificial places, are the ſix places aboue-mentioned, I haue thought good to ſet downe according to *Valerius*, the definition of euery place, and briefly to ſhew how euery ſuch place may be confirmed or impugned.

And firſt of Fore-iudgements or Ruled Caſes.

VVHat call you Fore-iudgements or Ruled Caſes?

They be Iudgments or ſentences heretofore pronounced, whereby Iudges take example to giue like iudgement in like Caſes.

How may a man confirme or impugne Fore-iudgements?

You ſhall confirme them by aggrauating the authoritie of thoſe that firſt pronounced them, and by the likeneſſe of the Caſes: but you ſhal impugne or confute them by extenuating or diminiſhing the authority of the firſt pronouncers, and by the vnlikenes of the Caſes.

Of Rumor and Fame.

VVHat difference is betwixt Rumor and Fame?

Rumor is a particular aſſertion or affirmation proceeding of ſome ſuſpition, without any certaine Author. But Fame is a common affirmation, hauing ſome certaine Author: either of which whoſoeuer will impugne, muſt call it an vncertaine brute or clamor, taking his beginning firſt of malice, and his increaſe through credulitie and lightneſſe of beleefe, and that the ſame may chance to the moſt innocent man, that is, through the Fraud of his enemies, publiſhing abroad falſe ſurmiſes againſt him. Contrarily, he that will defend Fame or Rumor, muſt ſay that it riſeth not of nought, nor is ſpred abroad without ſome iuſt cauſe, and that it is accounted as a publike Teſtimony, according to the old Prouerbe; which ſaith; *vox populi, vox Dei*, the voyce of the people is the voice of God.

Of Torture.

WHat is Torture?

Torture is a painefull kind of puniſhment, inuented for the inquiſition of trueth, and violently to wreſt or wring the ſame out of ſuch as would not otherwiſe confeſſe it.

How is this place to be confirmed or impugned?

It is to be confirmed by aggrauating the neceſſary vſe of torture for the finding out of the truth; but whoſo will impugne it, muſt ſay, that ſuch Torture cauſeth many times more lies then true tales to be told: for thoſe that be ſtrong and able to endure paine, and of a reſolute minde, will neuer yeeld for any torment to ſay otherwiſe then they liſt themſelues. Againe, if they be weake and not able to ſuffer paine, it maketh them to ſay whatſoeuer you will haue them, be it neuer ſo falſe.

Of Writings and Euidences.

WHat is meant by Writings?

Deedes, Indentures, Releaſes, Obligations, and ſuch like other Euidences before rehearſed.

How is this place to be impugned?

You may impugne Euidences or Writings, if ye can prooue them to be vnperfect any maner of way, as to be forged, to bee made by ſome colluſion or fraude, or to bee extorted by force from ſome that was put in feare, and ſuch like.

Of Oathes.

WHat is an Oath?

It is a religious affirming or denying ſome thing, by calling God to witneſſe, which is the ſtrongeſt bond that may be, to binde mans faith and conſcience.

How is this place to be confirmed or impugned?

He that will proue by this place, muſt aggrauate the integritie, honeſty and holineſſe of the parties that are ſworne, ſaying, that the Oath of an honeſt, holy, and religious man is of great importance: And hee that will impugne it, muſt doe cleane contrary, ſaying, That they are naughty men that are ſworne,

ſworne, and common Iurors, which by reaſon of wicked cuſtome of ſwearing will eaſily bee forſworne: or hee muſt ſay that the partie ſweareth for feare, loue, hatred, for hope of gaine, reward, and ſuch like.

Of Witneſſes.

What be Witneſſes?

Witneſſes be proofes of things done or not done, whoſe office is to ſpeake what they haue heard or knowne: the confirmation or confutation of which proofe dependeth vpon the goodneſſe or euilneſſe of the perſons.

To what end ſerueth the knowledge of places?

He that wil write or ſpeake of any matter probably, wiſely, or copiouſly: or will vnderſtand the effect, tenor, arguments, and proofes of other mens ſpeaches, and writings, hath as much need to be practiſed in theſe places, as a Huntſman is in knowing the haunts of his game which hee hunteth, for without that, he ſhall wander long time in vaine, and hardly find that which he ſeeketh: neither is it enough to know the places, vnleſſe you can aptly applie them and vſe them when occaſion ſhall ſerue, in diſputations made either by mouth or pen, which requireth a continuall exerciſe of ſuch as will be perfect therein. And therefore to the intent you might the better learne how to exerciſe your ſelfe in the foreſaid places, I haue thought good here to giue you at the leaſt one example ſet downe by *Hunnæus* in his Logicke: the Theame of which example is thus: Man ought to embrace vertue: which Theam hee doth not onely handle after the Logicall manner with ſhort ſpeach, but alſo after the Rhetoricall manner with copious ſpeach, vſing therein this threefold order: For firſt, hee bringeth in ſuch proofes as are to be gathered in reſpect of the ſubiect of the Theame. Secondly, thoſe that are to be gathered in reſpect of the Predicate of the ſame: and thirdly, thoſe that are to be had in reſpect of both.

The Theame or Propoſition.

MAn ought to embrace vertue.

From the definition of the ſubiect.

What arguments are to be gathered on the behalfe of the ſubiect of this Propoſition?

Theſe that follow, and firſt, from the definition thus: Sith of all ſenſible creatures man is the moſt noble and moſt worthy creature, for that he is endued with reaſon and counſell, and was created like to the image of God: it is moſt meete therefore that ſuch a creature ſhould bee like his Creator, in life adorned with ſuch vertue and goodneſſe as is anſwerable to true iudgement, which the Logicians would briefly expreſſe in this maner: it becommeth euery ſenſible body endued with reaſon to loue vertue: *Ergo*, euery man ought to loue vertue.

From the Etymologie.

IT becommeth euery creature that is made of the ſlime of the earth, to be void of all arrogancie and pride, to bee lowly, humble, and obedient to his Creator, and to imbrace vertue in obſeruing the Law of God deuoutly and religiouſly, wherefore man called in Latine *homo*, of this word *humo*, (that is to ſay) earth, or rather ſlime of the earth, taking his original from ſo baſe and vile a thing, ought to bee humble and voyd of all pride and arrogancie, and to loue vertue aboue all things, being alwayes obedient to God his Creator, and ready to do his moſt holy precepts and commandements.

Logically thus:

Euery ſenſible creature that is created of the ſlime of earth, ought to bee obedient to his Creator and to imbrace vertue, therefore man ought to bee obedient to his Creator, and to imbrace vertue.

From the Matter.

MAn is made of the ſelfe ſame Matter of which all other vnliuing, dumbe & vnſenſible creatures are made, (that is to ſay) of the foure elements, whereby he is ſubiect to alteration and corruption: wherefore man ought not to be proud or arrogant, but modeſt, humble, lowly, and obedient, ſhewing in all the actions of his life, that he is not vnmindfull of his baſe

baſe eſtate and condition, nor ignorant from whence he came, and what he is, euen no better then earth and duſt.

Logically thus.

Man is made of a baſe matter, as all other things are, therefore Man ought not to be proud, but to loue the vertue of humilitie and obedience.

From the forme or ſhape of Man.

IT hath been alwaies moſt firmely, and with one whole conſent agreed and beleeued, euen from the beginning of the world, that the true ſhape of Man is a reaſonable Soule, immortall, and capable of euerlaſting bleſſedneſſe, which Soule God of his goodneſſe did breathe into man, to the intent that he ſhould continually ſerue, honor, and obey him during this mortall life, and after death enioy eternall life: what great madneſſe were it then to thinke, that Man hauing obtained at Gods hands ſo noble a ſhape, ought not to embrace all noble vertues, and to gouerne all his actions in ſuch godly and vertuous manner, as he may at length attaine to the euerlaſting ioy whereunto he was firſt created and formed?

Logically thus:

Man conſiſteth of a Soule capable of eternall felicitie: *Ergo*, Man ought to loue vertue, whereby he may attaine to that felicitie.

From the generall kinde.

SIth it is giuen by nature to euery ſenſible Body to ſeeke his owne ſafety, and to be beſt affected (that is) to haue his full perfection according to his Kind: the loue of vertue therefore, whereby Man is made not onely perfect in this life, but alſo attaineth thereby euerlaſting ioy in the life to come, muſt needs be to him moſt naturall.

Logically thus:

Euery ſenſible body willingly deſireth that which is agreeable to his nature and kinde, therefore Man muſt needs loue vertue, as a thing moſt fit for his kinde.

From the ſpeciall kinde.

BOth Men and Women, Rich and Poore, Yong and Old, of what ſtate or calling ſocuer they be, if they intend to leade a good and godly life, haue need of vertue: wherefore all Men that will liue well, ought to embrace vertue.

Logically thus:

Both Rich and Poore, Yong and Old ought to loue vertue: *Ergo*, euery Man ought to loue vertue.

From the common Accidents.

EVery Man, after that hee hath ended this ſhort courſe of life, muſt appeare at the laſt day before the terrible iudgement ſeat of God, there to render account of all his deeds and words both good and bad, whereas euery man that hath done well, ſhal receiue for his good deedes a moſt glorious reward, euen life euerlaſting: but the wicked for his euill deeds ſhall be condemned to hell fire, that neuer ſhall be quenched, a iuſt reward for his deſerts: wherefore all men ought in this life to fly vice, and to embrace vertue, from whence all good actions doe ſpring.

Logically thus:

Euery man ſhall render account at the laſt day, of all his deeds both good and bad, and ſhall receiue a iuſt reward according to the ſame: *Ergo*, Euery man whileſt he liueth in this world, ought to fly vice, and to embrace vertue.

From the cauſe efficient.

SIth Man was created by God the Creator of all things, and Author of all goodneſſe, excellencie, and vertue, and was formed according to the very Image and likeneſſe of God: it behoueth man therefore to imitate his Creator, and by leading a godly and vertuous life, to ſhew that hee is ſomewhat like him, though not able in all things to attaine to the perfection of ſo perfect a patterne.

Logically thus:

God the cauſe efficient is good, therefore Man being the effect, ought to be good.

From

From the End.

THe Prophets and Apoſtles inſpired with the Holy Ghoſt, Author of all Truth, by many their writings doe teſtifie, that the greatneſſe and excellencie of that bleſſedneſſe wherunto Man is created, is ſuch as no man is able to expreſſe with tongue, nor in his heart or minde to conceiue the ſame: wherfore ſith Man is created to ſuch exceeding great bleſſedneſſe, it behoueth him to embrace vertue, which is the very meane and way to bring him to that bleſſedneſſe.

Logically thus:

Sith moſt glorious bleſſednes is the end of Man, Man therfore ought to embrace vertue, that he may attaine to that end.

What arguments are to be gathered on the behalfe of the Predicate, and from what places?

Theſe that follow, and ſuch like, and firſt from the definition thus:

From the Definition of the Predicate.

SIth Vertue is a morall habite, whereby Mans will and all his actions are alwayes directed to God, and gouerned according to true iudgement, and thereby are made moſt acceptable both to God and Man: Man therefore ought to embrace Vertue, from whence ſuch noble fruits doe ſpring.

Logically thus:

Man ought to loue that habite from whence all honeſt actions doe ſpring: therefore man ought to loue Vertue.

From the Deſcription.

MAn ought with all endeuour to follow that thing wherby he may attaine not a vaine and tranſitorie glory, but a true and euerlaſting glory, and thereby to be made acceptable both to God and Man: Wherefore Man ought to embrace Vertue, from whence ſuch glory ſpringeth.

Logically thus:

That thing is worthy to be beloued of Man, which getteth him euerlaſting glory: Therefore Vertue is worthy to be beloued.

From

From the Etymologie.

SIth Vertue, if you diligently conſider and weigh the ſignification of the word, is none other thing but a Noble affection of the minde, of great excellencie, and moſt meete for Man: it is not to be doubted, but that thoſe (which leauing ſo precious a thing, doe ſet their whole delight in ſeeking after worldly riches and bodily pleaſure) are much deceiued, and doe greatly offend.

Logically thus:

Such excellencie as is moſt meet for Man, becommeth Man beſt: Therefore Vertue becommeth him beſt.

From the generall Kinde.

SIth it is well knowne that Man ought with all diligence to ſeeke after thoſe habites, whereby humane nature is beſt adorned, and made moſt perfect: And that Vertue amongſt ſuch habites is the chiefe: becauſe that thereby the minde of Man is taught to know what truth is, and his will thereby is alwayes inclined to honeſt and laudable actions: Man therefore ought with al his power and endeuor to embrace Vertue.

Logically thus:

Man ought chiefely to loue thoſe habites, whereby his nature is made perfect: Therefore man ought to loue Vertue.

From the ſpeciall Kinde.

IT is moſt meete, yea moſt neceſſarie for all men to loue fortitude and temperance: for by temperance Mans wil is bridled, and kept from all euill luſts and affections, and by fortitude he is made free from feare of death: and as without temperance mans life cannot be honeſt, ſo without fortitude his death cannot be commendable: wherefore it plainly appeareth how neceſſary a thing it is for a man to embrace Vertue, as that which chiefely maketh his life honeſt and laudable, and his death glorious and honorable.

Logically thus:

A man ought to loue fortitude and temperance: *Ergo*, He ought to loue Vertue.

From

From the corruption of the Subiect.

THe deſtruction of Vertue is the cauſe of moſt grieuous euils, for the light of Vertue being extinct, the minde is immediately wrapped in ſuch darkeneſſe, as it cannot ſee nor diſcerne what is honeſt, what is profitable, or what is hurtfull: by meanes whereof man falleth into moſt filthie vices, which doe ſo infect and corrupt the life of man, as it becommeth moſt deteſtable both to God and Man: whereby it plainely appeareth how noble a thing Vertue is, and with what loue and diligence it ought to be embraced of all men.

Logically thus:

The deſtruction of Vertue is euill: therefore Vertue is good and worthy to be beloued.

From the vſe of the Subiect.

THe vſe of Vertue maketh mans life commendable, holy, glorious, and acceptable both to God and Man: then which nothing can bee in this world more to bee deſired of man: wherefore it manifeſtly appeareth, that Vertue is ſo noble a thing, as all men ought to beſtow all their ſtudie, labour and care in obtaining the ſame.

Logically thus:

The vſe of Vertue is good: Therefore Vertue is good.

From common Accidents.

SIth all men doe greatly deſire to haue their conſciences quieted, and their mindes free from all euill luſtes, affects, and paſſions, which with continuall ſtrife doe moleſt the ſame: and thereby doe cauſe Man to lead a miſerable life: Man therfore ought to refuſe no paine nor labour, ſo as he may attaine to Vertue, which is alwaies accompanied with that tranquillitie of minde and conſcience that is ſo much deſired.

Logically thus:

The tranquillitie of the minde and conſcience is to be deſired: *Ergo*, Vertue which is alwaies accompanied with that tranquillitie is to be deſired.

From the cauſe Efficient.

SIth true Vertue is not to be gotten by any mans labour, exerciſe, or induſtrie, without the great grace of God, who is chiefe Authour and Giuer of all good gifts: it well appeareth that Vertue is a moſt excellent thing, and moſt worthie to be had in admiration, and therefore with feruent loue and diligence to be embraced of all men.

Logically thus:

God the chiefe Author of all good, is the cauſe Efficient of Vertue: therefore Vertue proceeding of ſo worthy a cauſe, muſt needs be an excellent thing, and worthy of all men to be embraced.

From the Effect.

TRue honor and glory hath beene alwaies had amongſt all men in great admiration: becauſe it ſeemeth not only by mans iudgement, but alſo by the diuine iudgement of God, to be alwaies attributed to vertue: wherefore ſith Vertue doth yeeld ſuch noble fruits and effects, Vertue muſt needs be a noble thing it ſelfe, and worthy of all men to be embraced.

Logically thus:

The Effect of Vertue, which is true honor and glory, is good, and to be deſired.

From the End.

SIth euerlaſting bleſſednes is of ſuch excellencie, as neither tongue is able to expreſſe the ioyes thereof, nor minde to conceiue the ſame, and therefore ought to be deſired aboue all things, as the iuſt reward of all goodneſſe, and finall end of all euill, and that Vertue is the onely meane to bring man to that bleſſed End: who then will once thinke that Vertue is not to be eſteemed aboue all things, and worthy of all men to bee embraced?

Logically thus:

The end of Vertue, which is euerlaſting felicitie, is to bee deſired: *Ergo*, Vertue is to be deſired.

Hitherto

Hitherto you haue ſhewed how the aforeſaid Theme is to be proued with Arguments fetched aſwell from the Subiect as the Predicate: now ſhew what Arguments are to be fetched from both ioyned together?

Theſe that follow and ſuch like, and firſt by Compariſon, from the Leſſe to the More.

From the Leſſe to the More.

IF men will not let to beſtow any paine, labour or coſt to preſerue their bodies from death, ſickeneſſe, or any other hurt: how much more then ought they to endeuour themſelues to obtaine Vertue, which will preſerue their ſoules from all corrupt affections and euill vices, and thereby deliuer them from death euerlaſting?

Logically thus:

Man ought to be carefull of his bodily health: *Ergo*, Much more of his ſoules health, which is chiefely preſerued by Vertue.

From Similitude or Likeneſſe.

AS the beautie of the bodie is pleaſant to mans eyes: euen ſo the beautie of the minde or ſoule is as acceptable to God: and therefore as man will be diligent and careful in decking and adorning his body to pleaſe the eyes of men: euen ſo he ought to be moſt carefull to decke his ſoule and mind, with ſuch Vertues, as doe make the ſame in Gods ſight moſt acceptable.

Logically thus:

As the decking of the bodie is pleaſant to mens eyes: ſo the decking of the Soule is pleaſing to God.

From Authoritie.

Dauid the Prophet in the 34. Pſalme ſaith thus: Turne from euill, and doe that which is good. The Prophet *Micheas* alſo agreeth hereunto in ſaying thus: Deale iuſtly with all men, loue mercie, and walke diligently in the way of God. By which words theſe two godly Prophets doe teach no

other thing, then that Man forſaking all kinde of vice, ſhould with all diligence embrace Vertue.

Logically thus:

God teacheth by his Prophet *Dauid*, and alſo by *Micheas*, that Man ſhould fly Vice, and loue Vertue: *Ergo*, Man ought to loue Vertue. By daily exerciſing your ſelfe in ſuch examples as this is, you ſhall in ſhort time learne the right vſe of the places, and bee able thereby readily to apply them to euery good purpoſe.

Heere endeth the fourth Booke of Logick.

THE

THE FIFT BOOKE OF LOGICKE.

CHAP. I.

Of Argumentation, and of the foure kindes thereof in generall, and alſo of the firſt Principles of a Syllogiſme.

Hauing hitherto ſufficiently ſpoken of words both ſimple and compound, whereof all queſtions doe conſiſt, alſo of definition and diuiſion, of Method, of Propoſitions, and of the places: It reſteth now that I declare vnto you the formes and kinds of reaſoning called Argumentatiõ, which be the means whereby in all compound queſtions the trueth may bee diſcerned from falſhood, wherein conſiſteth the chiefeſt fruit of Logicke: and therefore you ſhal vnderſtand that there be foure principal kinds or formes of Argumentation, (that is) a Syllogiſme, an Inductiõ, an Ethymeme, and Example, I ſay here principall, becauſe there be diuers other formes which though they be not ſo neceſſary, yet I will briefly treat of them hereafter: But for ſo much as the Syllogiſme is the chiefeſt, whereunto all others are referred as things vnperfect, vnto a thing perfect, I wil firſt ſpeake of a Syllogiſme, and of all the parts thereof: but yet before I define or diuide a Syllogiſme, I thinke it very neceſſary to declare vnto you the firſt Principles aſwell Materiall, as Regular, of a ſimple Syllogiſme conſiſting of ſimple Propoſitions.

Which call you Materiall Principles?

Materiall Principles are three ſimple Propoſitions, and three termes, (that is to ſay) the Subiect, the Predicate, and the meane terme hereafter defined, whereof the Subiect and the Predicate are ſaid to be the outermoſt limits or bounds of any ſimple Propoſition.

Why are they called Termes or limits?

Becauſe they limite a Propoſition, euen as Dole-ſtones or Meares doe limite a piece of ground in the field, and be the vttermoſt parts or bounds whereunto any Propoſition is to bee reſolued, as for example in this Propoſition, euery man is a ſenſible body: theſe two words, man, and ſenſible body, are the termes, limits, or bounds, whereof as the ſaid Propoſition is compounded, ſo into the ſame it is to be reſolued, as into his vttermoſt parts that haue any ſignification: for letters and ſillables of themſelues be without ſignification, and therefore can limite no ſpeach, ſo that the termes of Propoſitions muſt be either Nounes, or Verbes, which be onely voices ſignificatiue, as haue been ſaid before.

Which be the Principles regulatiue?

The Principles regulatiue of a Syllogiſme bee theſe two phraſes of ſpeach, to bee ſpoken of all, and to bee ſpoken of none.

What is to be ſpoken of all?

That is, when the predicate being truly ſpoken of the Subiect, muſt needs be alſo ſpoken of all that is comprehended vnder the ſaid ſubiect: as when I ſay euery man is a ſenſible body: here this word ſenſible body, is not only ſpoken of man in generall, but alſo of *Peter* and *Iohn*, and of euery other man in particular, comprehended vnder the foreſaid Subiect, man.

What is to be ſpoken of none?

It is when the Predicate being denied to be ſpoken of the Subiect, is denied alſo to bee ſpoken of any thing contained in the Subiect: as when I ſay no man is a ſtone, here like as this word ſtone is denied to be ſpoken of man, ſo it is alſo denied to be ſpoken of *Peter* and *Iohn*, & of euery other ſingular man: out of which Definitions are gathered two neceſſary rules.

Which

Which be they?

The firſt rule is, whatſoeuer is truely affirmed of his naturall and proper Subiect, is alſo affirmed of all thoſe things which are contained vnder the ſaid Subiect: the ſecond rule is thus, whatſoeuer is denied to bee ſpoken of any Subiect, is alſo denied to bee ſpoken of euery thing contained vnder the ſaid Subiect.

Whereto ſerue theſe rules?

The firſt rule confirmeth all Syllogiſmes affirmatiue, and the ſecond confirmeth all Syllogiſmes negatiue.

CHAP. II.

Of a Syllogiſme, what it is, how it is diuided; and of what parts it conſiſteth.

What is a Syllogiſme?

A Syllogiſme is a kind of argument containing three Propoſitions, whereof the two firſt, commonly called the premiſſes, being diſpoſed according to moode, and figure, and granted, the third Propoſitiõ, otherwiſe called the concluſion, differing from the other two, followeth of neceſſitie, by vertue of the premiſſes: how theſe three Propoſitions are called, and what moode and figure is, ſhall be declared hereafter; In the meane time marke wel the two other points touching this Definition: firſt, that the Concluſion muſt not be all one, but differing from the premiſſes: ſecondly, that the ſaid Concluſion bee neceſſarily inferred of the premiſſes, as in this example: euery ſenſible body is a ſubſtance: euery man is a ſenſible bodie: *Ergo*, euery man is a ſubſtance: for if the Concluſion were thus: *Ergo*, euery ſenſible body is a ſubſtance, or euery man is a ſenſible bodie, the argument ſhould not be good, becauſe the Concluſion ſhould be all one with one of the premiſſes: the reaſon why the Concluſion muſt needes be inferred of the premiſſes, and ſo conſequently follow of the ſame, ſhalbe declared vnto you hereafter.

How is a Syllogiſme diuided according to the Schoolemen?

Firſt,

First, they diuide it according to the diuersity of the Propositions whereof it consisteth, into two kinds, *viz.* Categoricall, and Hypotheticall, (that is to say) simple and compound, calling that simple, which is made of simple Propositions, and that compound, which is made of compound Propositions: what simple and compound Propositions are, hath beene before defined. *Lib.3 cap.1.* Againe, they diuide the simple Syllogisme three maner of wayes, first according to the diuersitie of the termes into a common and into a singular Syllogisme, for if the terms whereof the Syllogisme consisteth, bee common, or generall, and specially the meane terme, or proose, then that Syllogisme is called a common Syllogisme: but if the meane terme or proose be *Individuum*, then that Syllogisme is said to be a singular Syllogisme, called of them, *Syllogismus expositorius*, whereof we shall speake hereafter: Secondly, they diuide a simple Syllogisme, according to the diuersitie of the figure, into a perfect, and vnperfect Syllogisme.

When is it said to be perfect?

When it needeth not to be altered any maner of way, otherwise then it is, that the consequent may manifestly appeare.

When is it said to be vnperfect?

When the Consequent doth not manifestly appeare, vnlesse the Syllogisme be altered either by conuersion, or transposing of the premisses, whereof we shall speake hereafter: Thirdly, they diuide a simple Syllogisme, according to the matter of the Propositions whereof it is made, into three kindes, that is, into a Syllogisme Demonstratiue, Dialecticall, and Sophisticall: of which three kindes wee shall speake hereafter, and in their proper places; so as in all, the Schoolemen make foure seuerall diuisions of a Syllogisme, the first according to the diuersitie of the Propositions, the second according to the diuersity of the Termes, the third according to the diuersitie of the figure, and the fourth according to the diuersitie of the matter of the Propositions whereof wee haue spoken before, and shewed how manifold such matter is: but in the meane time wee will shew you of what parts a simple common Syllogisme consisteth.

Of

Of how many parts doth a ſimple Syllogiſme conſiſt?
Of two; that is, Matter, and Forme.

CHAP. III.

Of the Matter and Forme of a ſimple common Syllogiſme.

What things are ſaid to bee the Matter of a Syllogiſme?
The Matter whereof a Syllogiſme is made, are three terms, and three Propoſitions, which we called before Materiall principles, and the Forme conſiſteth of figure and moode, whereof we ſhall ſpeak in the next Chapter.

Define what theſe three Termes be?
The one is called the Maior terme, or Maior extremitie, which is the Predicate of the queſtion that is to be prooued, the other is called the Minor terme, or minor extremity, which is the ſubiect of the queſtion, and theſe two Termes are knit together in the Concluſion, and made to agree by helpe of a third Terme, called the Meane terme or proofe.

What is the Meane terme?
It is the proofe of the queſtion which is twice repeated before the Concluſion, and not once mentioned in the ſame.

How is ſuch proofe to be found out?
Foure manner of wayes, (that is to ſay) by experience, by quickneſſe of witte, by erudition, and by ſearching the common places.

Giue examples of all theſe foure wayes.
1 By experience, as when we affirme that intemperance is to be fled, becauſe we know by experience, that it conſumeth both body and goods in vain pleaſures. 2 By wit, as to proue that the couetouſneſſe of wicked men is infinite: becauſe wit and reaſon teacheth vs, that if couetous men did either care for the Law of God, or for reaſon, they would not exceed ſo farre the bounds thereof. 3 By erudition, as to prooue that riches are not to be deſired ouer-greedily, but to ſerue neceſſitie: be-

cause it appeareth by the doctrine of *S. Paul*, that such as greedily seeke to be rich, doe fall into temptation, and into the snares of the Deuill. 4 By searching the common places: as when the proofe of any question is fetched from any of the common places before taught, as from the generall kinde, from the speciall kinde, from the difference, or property, and such like, whereof you haue had examples before.

Which be the three Propositions whereof a Syllogisme doth consist?

These three: The Maior, the Minor, and the Conclusion.

Which call you the Maior?

That which consisteth of the Predicate of the question, otherwise called the Maior terme, and of the Meane, or Proofe, being both ioyned together in one selfe Proposition; which Proposition is the whole strength of the Syllogisme, for it is the cause and proofe of the Conclusion.

Which call you the Minor?

That which consisteth of the Subiect of the question called the Minor terme, and of the Meane or proofe ioined together, which two Propositions are called by one generall name, premisses, because they goe before the Conclusion.

What is the Conclusion?

It is that which consisteth of the Predicate, and of the Subiect, and is the question it selfe concluded.

Giue example.

For example, let this bee your question: whether man be a substance or not, here you haue two extremes or termes, whereof substance being the Predicate, is the Maior terme, and man being here the subiect, is the minor terme: now to prooue that this word Substance, is properly and naturally spoken of man, as of his Subiect, and that you may truely knit these two extremes, or termes together, you must seeke out some cause or proofe, otherwise called the Meane terme, which being once found out, the Syllogisme is soone made: let the Meane terme therefore bee this word, Sensible body, for euery sensible body is a Substance, which proofe is fetched from the generall kinde, then forme your Syllogisme thus: euery sen-

sible

ſible bodie is a ſubſtance: but man is a ſenſible bodie: *Ergo*, man is a ſubſtance. Here you ſee that the Meane terme or proofe is twice repeated before the Concluſion: (that is to ſay) in the Maior Propoſition, together with the Predicate of the queſtion, called the Maior terme; and alſo in the Minor Propoſition together with the ſubiect of the queſtion called the Minor terme, and not once mentioned in the Concluſion. Thus much touching the Matter whereof a Syllogiſme conſiſteth: now of the Forme thereof.

CHAP. IIII.

Of the Forme of a Syllogiſme.

YOu ſayd before, that the Forme of a Syllogiſme comprehended Figure, and Moode, now therefore tell what Figure and Moode is, and how many of them there bee.

Figure is no other thing, but the diuers placing or diſpoſing of the meane terme in the premiſſes: which figure is three-fold; that is, Firſt, Second, and Third: for if the meane terme be the Subiect in the Maior Propoſition, and Predicate in the Minor, as in the example aboue, then it maketh a Syllogiſme of the firſt figure, and if it chance to be Predicate in both Propoſitions, then it maketh a Syllogiſme of the ſecond figure, as thus: no ſtone is a ſenſible body: but man is a ſenſible body: *Ergo*, no man is a ſtone: for here the meane terme, Senſible body, is Predicate in both Propoſitions: but if the meane be ſubiect in both Propoſitions, then it maketh a Syllogiſme of the third figure, as thus: euery man is a ſubſtance: euery man is a ſenſible body: *Ergo*, ſome ſenſible body is a ſubſtance: for here the meane terme, that is, Man, is ſubiect in both the firſt Propoſitions, and to theſe three figures do belong certaine moodes.

What is a moode?

A moode, called in Latine *modus*, amongſt the Logicians, is none other but the true ordering aſwell of the premiſſes, as of the concluſion in a Syllogiſme, according to due quantitie,

and quality: what the quantitie and quality of a Propoſition is, hath been taught before, *lib.3.cap.1.*

How many moodes doe belong to the firſt figure?

To the firſt figure doe belong 9. moodes, thus named:

Barbara: Celarent: Darij: Ferio: Baralipton:
Celantes: Dabitis: Fapeſmo: Friſeſomorum.

Whereof the firſt foure, becauſe they conclude directly, are called perfect moodes, making perfect Syllogiſmes: and the other fiue, becauſe they conclude vndirectly, are called vnperfect moodes, making vnperfect Syllogiſmes.

What is to conclude directly or indirectly?

That moode is ſayd to conclude directly, when the Maior terme is made the Predicate, and the Minor terme the ſubiect in the concluſion. But if in the concluſion the Minor terme be the Predicate, and the Maior terme the ſubiect, then that moode is ſaid to conclude directly: as for example: Euery ſenſible bodie is a ſubſtance: Man is a ſenſible body: *Ergo*, man is a ſubſtance. This Syllogiſme concludeth directly, becauſe the Maior terme, ſubſtance, is the Predicate in the concluſion: but if the concluſion were thus: *Ergo*, ſome ſubſtance is a man, then it ſhould conclude indirectly: becauſe this word man which was the ſubiect of the queſtion in this concluſion, is made the Predicate.

How many moodes doe belong to the ſecond figure?

Theſe foure: *Ceſare, Cameſtres, Feſtino, Baroco.*

How many moodes doe belong to the third Figure?

Theſe ſixe: *Darapti, Felapton, Diſamis, Datiſi, Bocardo,* and *Ferijſon*: which words beeing otherwiſe called Termes of Arte, and euery one conſiſting of three ſillables, were purpoſely inuented by the Schoolemen, to ſignifie the quantitie and qualitie of euery Propoſition contayned in a Syllogiſme, and are briefly ſet downe in theſe foure verſes following.

Barbara, Celarent, Darij, Ferio, Baralipton:
Celantes, Dabitis, Fapeſmo, Friſeſomorum:
Ceſare, Cameſtres, Feſtino, Baroco, Darapti:
Felapton, Diſamis, Datiſi, Bocardo, Ferijſon.

It ſeemeth to me that theſe names doe not euenly conſiſt each one of three Syllables, for in the two firſt verſes there be two Moods or names, whereof the one called Baralipton, *containeth foure Syllables, and the other called* Friſeſomorum, *containeth fiue Syllables.*

You ſay true, but theſe Syllables are no part of theſe two Moods, but ſerue only to fill vp the verſe: for this Syllable *ton*, is no part of the Mood *Baralip*: nor the two Syllables *morum*, are any part of the Mood *Friſeſo*.

What is to be conſidered in theſe words of Art or Moods?

Two things, (that is to ſay) the Vowels and the Conſonants contained in euery Mood, and what they ſignifie.

Which are thoſe Vowels, and what doe they ſignifie?

The Vowels be theſe foure, *a. e. i. o.* whereof *a.* ſignifieth an vniuerſall Affirmatiue, *e.* an vniuerſall Negatiue, *i.* a particular Affirmatiue, *o.* a particular Negatiue: of all which you ſhall haue examples in the ſixt Chapter of this Booke here following.

Which be the Conſonants, and what doe they ſignifie?

Wee ſhall haue cauſe to ſpeake of them hereafter in a fitter place.

In the meane time, then giue examples of the Moods belonging to all the Figures?

Before we giue examples, it ſhall not be amiſſe to ſet down certaine rules requiſite to all the three Figures, as well in generall, as in particular.

CHAP. V.

Of certaine Rules, as well Generall, as Speciall, belonging to the three Figures.

How many Generall Rules be there, which are common to all the three Figures?

Foure: two of quantitie, and two of qualitie.

Which is the firſt of thoſe that belong to quãtity?

In euery Syllogiſme it behoueth eyther one or both of the premiſſes to be vniuerſall.

Why ſo?

Becauſe that of two meere particular Propoſitions, nothing by order of Logick can conſequently follow: As for example, This Syllogiſme is not good: Some ſenſible body is a Man, but ſome Horſe is a ſenſible body: *Ergo*, a Horſe is a Man. The like reaſon is alſo to be vnderſtood, when the premiſſes are indefinit Propoſitions, yea or ſingular Propoſitions, if the meane terme be not likewiſe ſingular, for then it maketh a Syllogiſme expoſitorie, whereof we ſhall ſpeake hereafter.

Which is the ſecond Rule that belongeth to quantitie?

If any of the premiſſes be particular, then the concluſion alſo muſt be particular.

Why ſo?

Becauſe the concluſion being implyed of the premiſſes, ought alwayes to follow the weaker part of the ſame premiſſes, but the particular is alwayes accounted weaker then the vniuerſall, and the Negatiue weaker then the Affirmatiue.

What is the firſt Rule belonging to qualitie?

In euery Syllogiſme it behoueth either one or both of the premiſſes to be affirmatiue.

Why ſo?

Becauſe that of two pure Negatiue Propoſitions nothing can bee orderly concluded, as in this example: No man is a tree, but no Peare tree is a man: *Ergo*, No Peare tree is a tree: which Syllogiſme cannot be good, for the premiſſes are both true, and the concluſion is falſe.

Which is the ſecond Rule belonging to qualitie?

If any of the premiſſes be Negatiue, then the concluſion muſt alſo be Negatiue.

Why ſo?

Becauſe (as it hath beene ſaid before) the concluſion muſt follow the weaker part.

Which be the ſpeciall Rules belonging to the three Figures?

In the firſt foure Moods of the firſt Figure directly concluding the Minor, may not be a Negatiue, nor the Maior particular, but vniuerſall.

In the ſecond Figure, the Maior muſt not bee particular, and

and one of the premiſſes muſt bee a Negatiue.

In the third Figure, the Minor muſt not be a Negatiue, nor the concluſion vniuerſall: but as for the quantitie and qualitie of euery Propoſition in euery kinde of Syllogiſme, of what Figure ſoeuer it be, it ſhall plainly appeare by the Vowels, or rather Syllables of the Moods, otherwiſe called words of Art, annexed to the examples hereafter following.

Firſt giue examples of Syllogiſmes of the firſt Figure, and of his fourre perfect Moods directly concluding.

CHAP. VI.

Examples of the fourre perfect Moods belonging to the firſt Figure.

THe firſt Mood of the firſt Figure, is when three termes being giuen, a Syllogiſme is made of two vniuerſall Affirmatiues directly concluding an vniuerſall Affirmatiue, as this Syllogiſme heere following: the termes whereof be theſe, Senſible bodie, Subſtance, and Man placed in this ſort.

Bar. *Euery ſenſible body is a ſubſtance,*
ba- *But euery man is a ſenſible bodie:*
ra. Ergo, *Euery man is a ſubſtance.*

The name of this Mood is called *Barbara*, diuided into three Syllables, placed in the margent right againſt the Syllogiſme, to ſhew the quantitie and qualitie of euery Propoſition, according to the ſignifications of the Vowels contained in euery Syllable: and ſo are all the other names of the Moods hereafter following.

The ſecond Mood is, when three termes being giuen, a Syllogiſme is made of an vniuerſall Negatiue Maior, and of an vniuerſall Affirmatiue Minor, directly concluding an vniuerſall Negatiue: As for example, let the termes be theſe: Senſible Body, a Man, a Stone, and the Syllogiſme thus:

Ce-

Ce- *No ſenſible body is a ſtone,*
la- *But euery man is a ſenſible bodie:*
rent. Ergo, *No man is a ſtone.*

The name of this Mood is *Celarent.*

The third Mood is, when three termes being giuen, a Syllogiſme is made of an vniuerſall Affirmatiue Maior, and of a particular Affirmatiue Minor, directly concluding a particular Affirmatiue: As for example, let theſe be the termes: Senſible Body, Subſtance, and Man, and the Syllogiſme thus:

Da- *Euery ſenſible body is a ſubſtance,*
ri- *But ſome man is a ſenſible body:*
j. Ergo, *Some man is a ſubſtance.*

The name of this Mood is *Darij.*

The fourth Mood is, when three termes being giuen, a Syllogiſme is made of an vniuerſall Negatiue Maior, and a particular Affirmatiue Minor, directly concludimg a particular Negatiue: As for example, let theſe be the termes: Senſible Bodie, Man, and Stone: and the Syllogiſme thus:

Fe- *No ſenſible body is a ſtone,*
ri- *But ſome man is a ſenſible body:*
o. Ergo, *Some man is a ſtone.*

The name of this Mood is *Ferio.*

CHAP. VII.

Examples of the fiue vnperfect Moods of the firſt Figure.

Giue examples of the fiue Moods of the firſt Figure directly concluding.

The firſt Imperfect Moode of the firſt Figure indirectly concluding, is when the Maior and Minor, being both vniuerſall Affirmatiues, doe conclude indirectly a particular Affirmatiue, as thus:

Ba-

Ba- *Euery ſenſible body is a ſubſtance,*
ra- *Euery man is a ſenſible body:*
lip. Ergo, *Some ſubſtance is a man.*

The name of this Mood is *Baralipton*, whereof the laſt ſyllable, *ton*, is only to fill vp the verſe, as hath beene ſaid before.

The ſecond Imperfect Mood, is when a Syllogiſme is made of an vniuerſall Negatiue Maior, and an vniuerſall Affirmatiue Minor, indirectly concluding an vniuerſall Negatiue, as thus:

Ce- *No ſenſible body is a tree,*
lan- *Euery man is a ſenſible bodie:*
tis. Ergo, *No tree is a man.*

The name of this Mood is *Celantis*.

The third Imperfect Mood, is when a Syllogiſme is made of an vniuerſall Affirmatiue Maior, and of a particular Affirmatiue Minor, indirectly concluding a particular Affirmatiue, as thus:

Da- *Euery ſenſible bodie is a ſubſtance,*
bi- *Some man is a ſenſible bodie:*
tis. Ergo, *Some ſubſtance is a man.*

The name of this Mood is *Dabitis*.

The fourth Imperfect Mood, is when a Syllogiſme is made of an vniuerſall Affirmatiue Maior, and of an vniuerſall Negatiue Minor, indirectly concluding a particular Negatiue, as thus:

Fa- *Euery ſenſible bodie is a ſubſtance,*
peſ- *No tree is a ſenſible bodie:*
mo. Ergo, *Some ſubſtance is not a tree.*

The name of this Mood is *Fapeſmo*.

The fift Imperfect Mood, is when a Syllogiſme is made of a particular Affirmatiue Maior, and of an vniuerſall Negatiue Minor, indirectly concluding a particular Negatiue, as thus:

Fri- *Some ſenſible bodie is a ſubſtance,*
ſe- *But no tree is a ſenſible bodie:*
ſo. Ergo, *Some ſubſtance is not a tree.*

The name of this Mood is *Friſeſomorum*, whereof the two laſt ſyllables (as hath beene ſaid before) are only put to make vp the verſe.

CHAP. VIII.

Of the foure Moods belonging to the ſecond Figure.

Fiue examples of the foure Moodes belonging to the ſecond Figure.

The firſt Mood of the ſecond Figure, is when a Syllogiſme is made of an vniuerſall Negatiue Maior, and of an vniuerſall Affirmatiue Minor, directly concluding an vniuerſall Negatiue, thus:

Ce- *No ſtone is a ſenſible bodie,*
ſa- *Euery man is a ſenſible bodie:*
re. Ergo, *No man is a ſtone.*

The name of this Mood is *Ceſare.*

The ſecond Mood, is when a Syllogiſme is made of an vniuerſall Affirmatiue Maior, and of an vniuerſall Affirmatiue Minor, directly concluding an vniuerſall Negatiue, as thus:

Ca- *Euery man is a ſenſible bodie,*
meſ- *But no ſtone is a ſenſible bodie:*
tres. Ergo, *No ſtone is a man.*

The name of this Mood is *Cameſtres.*

The third Mood is when a Syllogiſme is made of an vniuerſall Negatiue Maior, and of a particular Affirmatiue Minor, directly concluding a particular Negatiue, as thus:

Feſ- *No ſtone is a ſenſible bodie,*
ti- *But ſome man is a ſenſible bodie*
no. Ergo, *Some man is not a ſtone.*

The name of this Mood is *Feſtino.*

The fourth Mood, is when a Syllogiſme is made of an vniuerſall

uerſall Affirmatiue Maior, and of a particular Minor, directly concluding a particular Negatiue, as thus:

Ba- *Euery man is a ſenſible bodie,*
ro- *But ſome ſtone is not a ſenſible bodie:*
co. Ergo, *Some ſtone is not a man.*

The name of this Mood is *Baroco.*

CHAP. IX.

Of the ſixe Moods belonging to the third Figure.

Giue examples of the ſixe Moodes belonging to the third Figure.

The firſt is when a Syllogiſme is made of an vniuerſall Affirmatiue Maior, and of an vniuerſall Affirmatiue Minor, directly concluding a particular Affirmatiue, as thus:

Da- *Euery man is a ſubſtance,*
rap- *But euery man is a ſenſible bodie:*
ti. Ergo, *Some ſenſible bodie is a ſubſtance.*

The name of this Mood is *Darapti.*

The ſecond Mood, is when a Syllogiſme is made of an vniuerſall Negatiue Maior, and of an vniuerſall Affirmatiue Minor, directly concluding a particular Negatiue, as thus:

Fe- *No Man is a ſtone,*
lap- *But euery man is a ſubſtance:*
ton. Ergo, *Some ſubſtance is not a ſtone.*

The name of this Mood is *Felapton.*

The third Mood, is when a Syllogiſme is made of a particular Affirmatiue Maior, and of an vniuerſall Affirmatiue Minor, directly concluding a particular Affirmatiue, as thus:

Di- *Some man is a ſubſtance,*
ſa- *But euery man is a ſenſible bodie:*
mis. Ergo, *Some ſenſible bodie is a ſubſtance.*

The name of this Mood is *Disamis*.

The fourth Mood, is when a Syllogisme is made of an vniuersall Affirmatiue Maior, and of a particular Affirmatiue Minor, concluding a particular Affirmatiue, as thus:

Da- *Euery man is a substance,*
ti- *But some man is a sensible bodie:*
si. Ergo, *Some sensible bodie is a substance.*

The name of this Mood is *Datisi*.

The fift Mood, is when a Syllogisme is made of a particular Negatiue Maior, and of an vniuersall Affirmatiue Minor, directly concluding a particular Negatiue, as thus:

Bo- *Some man is not a stone,*
car- *But euery man is a sensible bodie:*
do. Ergo, *Some sensible bodie is not a stone.*

The name of this Mood is *Bocardo*.

The sixt Mood, is when a Syllogisme is made of an vniuersall Negatiue Maior, and of a particular Affirmatiue Minor, directly concluding a particular Negatiue, as thus:

Fe- *No man is a stone,*
ri- *But some man is a sensible bodie:*
son. Ergo, *Some sensible bodie is not a stone.*

The name of this Mood is *Ferison*.

Thus you haue all the three Figures, together with their Moods, plainly set forth with examples.

CHAP. X.

Of a Syllogisme expositorie.

AND now because a Syllogisme expository is said to be a Syllogisme of the third Figure: I thinke it most meete to giue you an example thereof euen here: for I haue already defined the same before. *Yea, I remember yee said it was expòsitorie, when the proofe or meane terme is an* Indiuiduum: *but if yee giue example, I shall the better vnderstand it.*

Let

Let this then be your example, to prooue ſome men to bee both Orators and Philoſophers, by a Syllogiſme expoſitorie thus: *Cicero* was an Orator: but *Cicero* was a Philoſopher: *Ergo*, ſome men are both Orators and Philoſophers: againe, to prooue that ſome rich men are not wiſe, thus: *Craſſus* was not wiſe, but *Craſſus* was rich: *Ergo*, ſome rich men are not wiſe. thus you ſee that this kind of Syllogiſme ſerueth to proue both affirmatiuely and negatiuely, as it were by way of example.

CHAP. XI.

An obiection concerning the three Figures, and Moodes belonging to the ſame.

TO what purpoſe ſerue ſo many figures and moodes, ſith the firſt figure, and the foure firſt moodes belonging to the ſame are onely perfect, yea, and ſo perfect indeed, as the Mathematicians in ſeeking out the truth of any probleme, will vſe none other, becauſe the firſt figure alone doth ſuffice to conclude all kindes of problemes whatſoeuer they be, whereby it ſhould ſeeme, that the two other figures, with their moodes, be ſuperfluous?

They be not altogether ſuperfluous; for as the firſt figure ſerueth chiefly and onely to conclude an vniuerſal affirmatiue, ſo the ſecond figure ſerueth to conclude an vniuerſal negatiue, and the third figure to conclude both a particular affirmatiue, and alſo a particular negatiue, as you may perceiue very well by the examples before rehearſed; neither be the fifteen vnperfect moodes ſo vnperfect, but that they may eaſily be reduced vnto the foure perfect, by one of theſe wayes heere following, (that is to ſay) either by conuerſion, or by tranſpoſing of the premiſſes: or elſe by a Syllogiſme leading to impoſſibilitie, of which three wayes of Reduction we come now to ſpeake: by which things it doth plainely appeare what difference there is betwixt a perfect and vnperfect Syllogiſme; for the perfect Syllogiſme hath no need of theſe helpes to make the Concluſion manifeſt, as hath been ſaid before.

CHAP. XII.

Of Reduction, and of the kindes thereof, and alſo of the ſignification of certaine conſonants in the words of Art ſeruing to Reduction.

What is Reduction?

WReduction here is none other thing, but a declaration, prouing or ſhewing the goodnes of an vnperfect Syllogiſme, by a Syllogiſme of a perfect moode.

How manfold is ſuch Reduction?

Two-fold; for it is either offenſiue, or elſe by impoſſibility.

What is Reduction offenſiue?

Reduction offenſiue is, when a Syllogiſme is reduced to his perfection, either by conuerſion, or by tranſpoſing the premiſſes, or elſe by both at once.

What meane yee by tranſpoſing of the premiſſes, for as touching conuerſion ye haue ſpoken thereof before, lib. 3. cap. 6.

The premiſſes are ſaid to be tranſpoſed, when the Maior is put in the Minors place; or contrariwiſe the Minor into the Maiors place.

What is Reduction by impoſſibilitie?

Reduction by impoſſibility is, when the goodneſſe of the Syllogiſme is ſo proued, as the aduerſary denying the ſame, muſt needs be brought to ſome abſurditie, as to confeſſe two Contradictories to be both true at once, or ſome propoſition to be falſe, which he hath confeſſed before to be true, or is manifeſtly true of it ſelfe. But firſt we wil ſpeake of Reduction offenſiue, and then of Reduction by impoſſibility; and becauſe that Reduction offenſiue is done ſometime by conuerſion, and ſometime by tranſpoſition, and ſometime by both at once: and againe, that ſometime one of the premiſſes, ſomtime both, and ſometime no more but the Concluſion onely is conuerted, and that ſometime by ſimple conuerſion, and ſometime by conuerſion *per accidens*: the Schoolemen for eaſement of the memorie, haue made eight of the Conſonants, beſides the Vowels in the words of Art before mentioned, to be ſignificatiue, and to declare

declare how euery propoſition ought to be reduced.

For firſt, theſe foure Conſonants, *b.c.d.f.* (with one of the which euery vnperfect moode doth begin) doe ſhew that ſuch vnperfect moodes ought to bee reduced into thoſe perfect moodes, which doe begin with the like letter, as,

Baralipton, Baroco, Bocardo, into *Barbara,*
Celantes, Caſare, Cameſtres, into *Celarent,*
Dabitis, Darapti, Diſamis, Datiſi, into *Darij,*
Fapeſmo, Friſeſomorum, Felapton, Feriſon, Feſtino, into *Darij.*

Which be the other foure Conſonants, and what doe they ſignifie?

The other foure Conſonants put betwixt the Vowels, bee theſe, *ſ. p. m. c.* whereof *ſ.* ſignifieth ſimple conuerſion, (that is to ſay) that the Vowell, which next before this Conſonant, is to be ſimply conuerted, *p.* ſignifieth conuerſion *per accidens*, *m.* betokeneth tranſpoſition of the premiſſes, *c.* in the latter end or midſt of the moode, betokeneth Reduction by impoſſibilitie as in *Baroco*, and *Bocardo.*

Giue examples, and ſhew how ſuch Reduction is to be made.

Firſt, as touching reduction by conuerſion, *Ceſare* is reduced into *Celarent* by ſimple conuerſion of the Maior: as this Syllogiſme in *Ceſare.*

Ce- *No tree is a ſenſible body,*
ſa- *But euery man is a ſenſible body:* } *which is reduced into Celarent, thus:*
re. Ergo, *no man is a tree.*

Ce- *No ſenſible body is a tree,*
la- *But euery man is a ſenſible bodie:*
rent. Ergo, *no man is a tree.*

And *Cameſtres* is reduced into *Celarent* by ſimple conuerting the Concluſion, and alſo by tranſpoſing the premiſſes, as this Syllogiſme in *Cameſtres.*

Ca- *Euery man is a ſenſible body,*
meſ- *But no tree is a ſenſible body:* } *which is reduced into Celarent, thus:*
tres. Ergo, *no tree is a man.*

Ce-

Ce- *No ſenſible body is a tree,*
la- *But euery man is a ſenſible bodie:*
rent. Ergo, *No man is a tree.*

Feſtino is reduced into *Ferio*, by ſimply conuerting the Maior, as in this Syllogiſme in *Feſtino*.

Feſ- *No ſtone is a ſenſible body,*
ti- *But ſome man is a ſenſible body:*
no. Ergo, *Some man is not a ſtone.*

which is reduced into Ferio thus.

Fe- *No ſenſible body is a ſtone,*
ri- *But ſome man is a ſenſible body:*
o. Ergo, *Some man is not a ſtone.*

Darapti is reduced from *Darij* by conuerting the minor *per accidens*, as this Syllogiſme in *Darapti*.

Da- *Euery man is a ſubſtance,*
rap- *But euery man is a ſenſible body:*
ti. Ergo, *ſome ſenſible body is a ſubſtance.*

which is reduced into Darij thus.

Da- *Euery man is a ſubſtance,*
ri- *But ſome ſenſible body is a man:*
j. Ergo, *Some ſenſible body is a ſubſtance.*

Feriſon is reduced into *Ferio*, by ſimple conuerſion of the minor, as this Syllogiſme in *Feriſon*.

Fe- *No man is a ſtone.*
ri- *But ſome man is a ſenſible body:*
ſon. Ergo, *ſome ſenſible body is not a ſtone*

which is reduced into Ferio thus.

Fe- *No man is a ſtone,*
ri- *But ſome ſenſible body is a man:*
ſon. Ergo, *ſome ſenſible body is not a ſtone.*

And ſo forth in all the reſt, according as the ſignificatiue Conſonants doe direct you.

Of

CHAP. XIII.

Of Reduction by Impoſſiblitie.

How is Reduction by impoſſibilitie made?

By ioyning the Contradictorie of the concluon to one of the premiſſes, and to diſpoſe the ſame according to ſome one of the perfect moodes of the firſt figure, in ſuch ſort as you may thereby make your Concluſion contradictory to the premiſſe which you left out, and was granted by your aduerſary, whereby your aduerſary is brought into an abſurditie, to confeſſe two contradictories, to be true both at once.

Giue examples.

As for example, if your aduerſarie would denie this Syllogiſme in *Baroco*, euery man is a ſenſible body: but ſome tree is not a ſenſible bodie: *Ergo*, ſome tree is not a man: then you may reduce it to the firſt Moode of the firſt figure, which is *Barbara*, by making the contradictorie of your Concluſion to be the Minor of your Syllogiſme in this ſort, euery man is a ſenſible body: but euery tree is a man: *Ergo*, euery tree is a ſenſible body, which argument he cannot denie, becauſe hee hath granted the Minor to be true: for if this Propoſition, ſome tree is not a man, be falſe, then this propoſition, euery tree is a man, muſt needes be true, for two Contradictories cannot bee both true at once, and two true premiſſes muſt needes inferre a true Concluſion; and note that according to the diuerſitie of the figures, the Contradictory of the Concluſion is diuerſly diſpoſed (that is to ſay) made either Maior or Minor accordingly, for in all the Moodes of the ſecond figure it muſt bee made the Minor, the former Maior being ſtill reſerued; and in the third figure it muſt be the Maior, the former Minor being ſtill reſerued.

To which of the perfect Moodes is euery vnperfect Moode to bee reduced by impoſſibilitie?

To know this, it ſhall be needfull to learne, firſt the vſe of certaine words compounded of diuers ſillables, and inuented by the Schoolemen for this purpoſe.

Which be thoſe words ?

The words be theſe contained in this verſe following, *neſciebatis: odiebam: letare Romanis*: whereof the firſt *neſciebatis*, containing fiue ſillables, repreſenteth the fiue vnperfect moods of the firſt figure: *odiebam* hauing foure ſillables, betokeneth the foure vnperfect moodes of the ſecond figure: *letare Romanis*, containing ſixe ſillables, ſignifieth the ſixe vnperfect moods of the third figure: in all which words the foure vowels, *a. e. i. o.* doe ſtil retaine their old ſignifications before taught, ſeruing here chiefly to ſhew the quantity and qualitie of euery Concluſion, for euery vnperfect moode muſt bee reduced to that perfect moode of the firſt figure, which hath ſuch Concluſion as that vowel of the ſillable repreſenting that vnperfect mood doth ſignifie: as for example in this word *neſciebatis*, here you ſee, that in the ſillable *neſ.* repreſenting the firſt vnperfect moode called before *Baralipton*, the vowel *e.* ſignifying an vniuerſall negatiue, doth ſhew that this moode is to be reduced into *Celarent*, whoſe concluſion is an vniuerſall negatiue, ſo as the order of the ſillables in the word *neſciebatis*, together with the ſignification of the vowels contained in the ſaid ſillables, you may plainely perceiue that *Baralipton* is to be reduced into *Celarent*: *Celantes* into *Darij*, *Dabitis* into *Celarent*, *Fapeſmo* into *Barbara*, *Friſelon* into *Darij*. The like obſeruation and conſideration is to be had in the other words, repreſenting the reſt of the imperfect moodes of the ſecond and third figure: for *odiebam* appointeth *Ceſare* to be reduced into *Ferio*, *Cameſtres* to *Darij*, *Feſtino* to *Celarent*, *Baroco* to *Barbara*: againe *letare Romanis* appointeth *Darapti* to *Celarent*, *Felapton* to *Barbara*, *Diſamis* to *Celarent*, *Datiſi* to *Ferio*, *Bocardo* to *Barbara*, and *Feriſon* to *Darij*, whereof I giue you no examples, becauſe I would haue you to exerciſe your ſelfe in examining the former examples of the three figures, and to ſee how you can reduce each vnperfect moode, to his perfect moode by impoſſibilitie, according to theſe ſhort rules here ſet downe.

The Schoolemen after they haue taught the vſe of the moodes, and of reduction, doe immediatly treat of a ſyllogiſme, made in oblique caſes, and alſo of the ſixe habilities,

and

and three defects of a Syllogiſme: all which I willingly paſſe ouer with ſilence, as things more curious then profitable, for truely I know not whereto the Syllogiſme made in oblique Caſes, doth ſerue more then for variety ſake.

CHAP. XIIII.

Of Syllogiſmes made in oblique Caſes, and of the ſixe Habilities, and three defects of a Syllogiſme.

What meane you by oblique Caſes?

You learned in your Accidents, that euery Noune hath ſixe Caſes, (that is to ſay) the Nominatiue, the Genitiue, the Datiue, the Accuſatiue the Vocatiue, and the Ablatiue, wherof the Nominatiue is onely right, and all the reſt are called oblique: as this is a Syllogiſme made in oblique Caſes: euery drawing beaſt belongeth to man, or is the beaſt of man: but an oxe is a drawing beaſt: *Ergo*, an oxe belongeth to man, or is the beaſt of man, and as for the ſixe habilities called *ſex poteſtates Syllogiſmi*, they are but meanes to proue the goodneſſe of one Syllogiſme by another, or to ſhew which is more vniuerſall, or comprehendeth more then another, or to conclude a trueth of falſe premiſſes, which God wot is a ſillie kinde of concluſion, the beſt parts of which habilities are more eaſily learned by the rules and examples before giuen, then by thoſe that they ſet downe in their treatiſes touching the ſame. Likewiſe the three defects, are none other but Elenches, or Fallaxes, wherof there bee thirteene kindes ſet downe by *Ariſtotle* himſelfe, whereof we ſhall ſpeake hereafter, in their place, ſo as they might ſay that there are thirteene defects as well as three, and therefore leauing to trouble you with theſe things, I minde here to treate of a compound Syllogiſme.

CHAP. XV.

Of a compound Syllogiſme, and of the diuers kindes thereof.

What is a compound Syllogiſme, and how many kinds thereof bee there?

A compound Syllogiſme is that which is made of compound Propoſitions, whereof as there be three ſorts, ſo they make three kindes of compound Syllogiſmes, (that is to ſay) conditionall, diſiunctiue, and copulatiue.

Of how many parts doth a compound Syllogiſme conſiſt?

Of three, as well as a ſimple Syllogiſme, that is, of the Maior, containing two ſimple Propoſitions, and of the Minor, repeating the one part of the Maior, and of the Concluſion, concluding the other part of the Maior, as in this example: if this woman hath had a childe, ſhe hath laine with a man: but ſhee hath had a childe: *Ergo*, ſhe hath laine with a man.

How is the trueth of a compound Syllogiſme to be found out?

By reducing the ſame into a ſimple Syllogiſme thus; euery woman that hath had a childe, hath laine with a man: but this woman hath had a childe: *Ergo*, ſhe hath laine with a man.

Are there no other kindes of compound Syllogiſmes?

No, if you conſider the order of concluding, there be but three kindes or wayes, (that is to ſay) conditionall, diſiunctiue and copulatiue; but if you conſider the varietie in vttering ſuch Syllogiſmes, you may make ſeuen ſorts or wayes, whereof three appertaine to the conditionall, two to the diſiunctiue, and two to the copulatiue.

Which is the firſt way?

The firſt way is of the antecedent, which being granted, the conſequent muſt needs follow, both affirmatiuely, and negatiuely: Affirmatiuely thus: if he be godly, he is bleſſed: he is godly, therefore bleſſed: negatiuely thus, if he be not godly, he ſhall not be bleſſed, but hee is not godly: *Ergo*, hee is not bleſſed.

Which is the ſecond way?

The

The ſecond way is of the Conſequent, which failing, the Antecedent muſt alſo needs faile, as thus: If he be wiſe, he is free; but he is not free: *Ergo*, not wiſe.

Which is the third way?

The third way, is when by granting the Antecedent, the Conſequent faileth, as thus: If he be not wiſe, he is wretched; but he is wiſe: *Ergo*, not wretched.

Which is the fourth way?

The fourth way, is when the former part of the maior Propoſition diſiunctiue being put, the latter part is cleane taken away, as thus: He is either good or euill; but he is good: *Ergo*, not euill.

Which is the fift way?

The fift way, is when the former part of the Diſiunctiue being taken away, the latter part muſt needs ſtand, as thus: He is either good or euill; but he is not good: *Ergo*, hee is euill; for all Syllogiſmes Diſiunctiue, are made for the moſt part of parts repugnant, whereof there can be no more, but one true part.

Which is the ſixt way?

The ſixt way, is by putting a Negatiue before the Coniunction copulatiue, ſo as it maketh the Antecedent to ſtand, and taketh away the Conſequent, as thus: He is not both wiſe and wretched; but he is wiſe: *Ergo*, not wretched.

Which is the ſeuenth way?

The ſeuenth way, is when the Negatiue is placed in like manner before the Coniunction copulatiue, but yet ſo as the Antecedent being taken away, the Conſequent doth ſtand, as thus: He is not both wiſe and wretched; but he is not wiſe: *Ergo*, wretched.

CHAP. XVI.

Of a Conſequent, and by what meanes and rules the goodneſſe thereof is to be knowne.

BVt ſith the goodneſſe of an Hypotheticall Syllogiſme dependeth vpon the goodneſſe of the Conſequent: it ſhall not bee amiſſe to treate heere of a Conſequent, and firſt to define what it is, and to ſhew how it is diuided.

What is a Conſequent?

A Conſequent, is a ſpeech conſiſting of ſuch parts as doe follow one another, and are ioyned together with ſome rationall, (that is to ſay) an inferring or imploying Coniunction, as *Ergo*, then, therefore, and ſuch like.

How many parts are requiſite in a Conſequent?

Three, that is, the Antecedent, the Conſequent, and the inferring Signe or Note, for of theſe three parts euery Conſequent conſiſteth.

How is it diuided?

Into two, that is, Good and Euill: againe, the good is diuided into two, that is, Formall and Materiall.

When is it ſaid to be Formall?

When the Antecedent being true, the Conſequent doth neceſſarily follow thereof, as when I ſay: This woman hath had a child, *Ergo*, ſhee hath laine with a man.

When is it ſaid to be Materiall?

When the Conſequent doth not of neceſſitie, but caſually follow, the Antecedent being true: as *Socrates* walketh abroad: *Ergo*, it is faire weather.

Whereupon doth the goodneſſe of a Conſequent chiefely depend?

It dependeth not ſo much of the truth of the Antecedent, and of the Conſequent, as of the neceſſarie connexion, or knitting of them together: and if the ſame be in forme of a Syllogiſme, it requireth alſo the precepts of Mood and Figure before taught to be obſerued.

How

How elſe ſhall a man know whether a Conſequent bee good or not?

By examining the ſame with the Maximes or generall rules of the places: whereof ſome doe yeeld proofes or cauſes neceſſarie, ſome probable, and ſome only coniecturall.

What rules doe the Schoole-men ſet downe to know a good Conſequent?

They ſet downe ſome more, ſome leſſe, but *Cæſarius* only reciteth two, which are theſe: The firſt is, if a Conſequent doth neceſſarily follow of his Antecedent, then the contrary of the Antecedent muſt needs neceſſarily follow the contrary of the Conſequent: As for example, becauſe this is a good Cõſequent to ſay, it is a man: *Ergo*, it is a ſenſible body: it is a good Conquent to ſay, it is no ſenſible body: *Ergo*, it is no man: the reaſon thereof is, becauſe the contrary of the Conſequent and the Antecedent cannot bee both true together, but one of them muſt needs be falſe. The ſecond rule is, that whatſoeuer followeth vpon a good Conſequent, muſt needs alſo follow vpon the Antecedent therof: As for example, if it be a good Conſequent to ſay, it is a man: *Ergo*, it is a ſenſible body: ye may aſwel ſay, if it be a ſenſible body: *Ergo*, it is a ſubſtance: and ſith that a ſenſible body is a ſubſtance, you may therefore aſwel conclude that a man is a ſubſtãce. To theſe rules you may adde alſo the third, which is, that of true things, nothing can follow but truth: but of falſe things, ſometime that which is falſe, and ſometime that which is true, as hath bin ſaid before: and yet ſuch truth followeth not by vertue of the falſe premiſes, but becauſe the cõcluſion or Conſequent is a true Propoſition of it ſelfe: As in this example. Euery ſenſible body is a tree, but euery Peare-tree is a ſenſible body: *Ergo*, euery Peare-tree is a tree.

CHAP.

CHAP. XVII.

Of a Syllogiſme Demonſtratiue.

HItherto we haue treated of a Syllogiſme, according to the firſt three of the foure diuiſions thereof, before mentioned: for if yee remember well, we ſaid that according to the firſt diuiſion, a Syllogiſme is either Categoricall or Hypotheticall, according to the ſecond diuiſion, eyther common or expoſitory, according to the third diuiſion, eyther perfect or vnperfect, and according to the fourth diuiſion, eyther Demonſtratiue, Dialecticall, or Sophiſticall, whereof we come now to ſpeake, and firſt of a Syllogiſme demonſtratiue.

What is a Syllogiſme Demonſtratiue?

A Syllogiſme Demonſtratiue is that which is made of neceſſarie, immediate, true, certaine, and infallible Propoſitions, being firſt and ſo knowne, as they neede none other proofe.

What meane yee by neceſſary and immediate Propoſitions?

Neceſſarie Propoſitions be thoſe which cannot bee otherwiſe, as thoſe which doe conſiſt of the generall kinde, of the ſpeciall kinde, of the difference, or of the propertie, as hath beene ſaid before: and therefore *Ariſtotle* maketh a difference betwixt a Demonſtratiue and a Dialecticall Propoſition, for a Demonſtratiue Propoſition conſiſting of matter naturall, is neceſſarily true, and cannot be otherwiſe, but a Dialecticall Propoſition, conſiſting of matter contingent, or caſuall, is onely probable, and may be otherwiſe.

What be immediate Propoſitions?

Immediate Propoſitions are thoſe which are firſt, and haue none before them, whereby they can be proued: as euery ſenſible bodie endued with reaſon is apt to learne. *Ariſtotle* alſo ſetteth downe three properties or conditions belonging to the Subiect and Predicate of a Demonſtratiue Propoſition.

Which be thoſe Properties?

Theſe,

Theſe, to be ſpoken of all, by it ſelfe, and vniuerſally.

What is to be ſpoken of all?

It is when the Predicate is knowne to be altogether and alwaies in the Subiect, eyther as a part of the ſubſtance thereof, as when it is a generall kinde, the ſpeciall kind, the difference, or the propertie, as ſome inſeparable accident alwaies incident to the ſaid ſubiect, as when I ſay: Euery man is a ſenſible bodie: or euery man is endued with reaſon: or euery man is apt to ſpeake: or euery Swanne is white: or euery fire is hot.

What is to be ſpoken by it ſelfe?

That is, when the Predicate is eyther the definition of the Subiect, as a man is a ſenſible bodie endued with reaſon: or elſe ſome part of the Definition, as man is a ſenſible bodie, or man is endued with reaſon.

What is to be ſpoken vniuerſally?

It is when the Predicate is in the Subiect, and in euery ſuch Subiect by it ſelfe; and firſt, as when I ſay, a man is a ſenſible bodie endued with reaſon: heere this Predicate ſenſible bodie endued with reaſon, is not onely ſpoken of man, but of euery man in generall by it ſelfe: and firſt: for if yee ſhould ſay, *Peter* or *Socrates* is a ſenſible bodie endued with reaſon: heere the Predicate is not ſpoken of any of theſe, as firſt, but in the ſecond place, becauſe they are comprehended vnder the word man. For generall kinds are ſaid to be before ſpeciall kindes, and ſpecial kinds before Indiuiduums, as hath bin ſaid before.

How doth Ariſtotle *define Demonſtration?*

In this ſort: Demonſtration is a Syllogiſme made of ſuch Propoſitions as are true: firſt immediat, and manifeſtly known, and be the cauſes of the concluſion: firſt and immediate here is all one, ſignifying ſuch Propoſitions as need not to be proued or made more euident by any other former Propoſitions. Againe, the premiſes muſt be more knowne then the concluſion, for otherwiſe it ſhould neyther be Demonſtration, nor yet good Syllogiſme. Finally, the Premiſes muſt render the very cauſe of the concluſion: and therefore *Ariſtotle* in another place ſaith, that Demonſtration is a Syllogiſme cauſing knowledge and ſcience.

What is Science?

It is a firme and aſſured knowledge of any thing.

What is to know?

We are ſaid to know a thing, when we know the true cauſes thereof, and that it cannot be otherwiſe: for to make a perfect Demonſtration, we muſt not only ſhew that there is ſuch a thing as we goe about to proue, but alſo we muſt ſhew the cauſe why it is ſo: for (as *Ariſtotle* ſaith) euery diſcipline and doctrine intellectiue dependeth vpon a former knowledge, which is two-fold, whereof the one is to know that the principles (that is to ſay) the premiſes of the Demonſtration bee true, and the other is to know the true ſignification of the Subiect and Predicate of the queſtion: for vnleſſe a man know what the name of the Subiect ſignifieth, whereof the queſtion riſeth, and alſo the proper qualities of the ſame, how ſhall hee be able to iudge, whether the proofe which is brought in to proue the queſtion withall be to the purpoſe or not? Againe, vnleſſe he know the premiſes to be true, the Demonſtration ſhall breed no certaine knowledge in him.

Giue example of a Syllogiſme Demonſtratiue.

Let this be your example: Euery ſenſible bodie endued with reaſon, is apt to learne: but euery man is a ſenſible body endued with reaſon: *Ergo*, euery man is apt to learne. Heere you ſee that in this Syllogiſme the premiſes being true and firſt, doe render the cauſe of the concluſion: and thereby doe imply a moſt true Conſequent: for whoſo would goe about to demonſtrate any of the premiſes by ſome other former, or more knowne Propoſitions, ſhould loſe his labour, ſith there is none before them more certaine, nor more knowne to proue this concluſion withall then they: for to vnderſtand the truth of theſe premiſes, it ſufficeth onely to know the ſignification of the termes, and to haue ſome experience of the thing called Man: and therefore this kinde of Demonſtration is called of the Schoole-men, *Syllogiſmus Scientificus*, becauſe it yeeldeth the perfect knowledge and Science of the thing in queſtion.

CHAP.

CHAP. XVIII.

Of the certaintie of Mans knowledge.

Whereof dependeth the certaintie of Mans knowledge?

Of three things, that is, of vniuerſall experience, of principles, and of naturall knowledge that a man hath in iudging of Conſequents: for theſe be three infallible rules of certitude or truth in all kindes of doctrine.

What is vniuerſall experience?

Vniuerſall experience is the common iudgement of men, in ſuch things as are to be perceiued and knowne by the outward ſences: as Fire to be hot, the Heauens to turne round about, Wine and Pepper to bee hotte in operation, Women to bring forth children, and not Men: which things all men (vnleſſe they be madde, and out of their wittes) muſt needs confeſſe to be true.

What be Principles?

Principles bee certaine generall conceptions and naturall knowledges grafted in mans minde of God, to the intent that by the helpe thereof, he might inuent ſuch Arts as are neceſſarie in this life for mans behoofe; for by the naturall knowledge of the minde we vnderſtand, Number, Order, Proportion, and all other neceſſarie Artes and Sciences.

How doth Ariſtotle *define Principles?*

In this manner: Principles be true Propoſitions, hauing credit of themſelues, and need no other proofe.

How many Diuiſions doe the Schoole-men make Principles?

Diuers.

Rehearſe thoſe Diuiſions.

The firſt is, of Principles, ſome be called Speculatiue, and ſome Practiue: The ſpeculatiue be thoſe naturall knowledges or Propoſitions, whereof Naturall Philoſophie or the Mathematicall Sciences be grounded, as theſe: The whole is more then his part: Thoſe things which are equall to a third, are

equall among themſelues: of one ſimple body, there is but one naturall mouing, and ſuch like. The Principles Practiue, bee thoſe naturall knowledges, whereby mens manners are gouerned: for by this naturall light we know the difference betwixt good and euill: As for example: theſe be Principles Practiue: God is to be honored and obeyed: Iuſtice is to be embraced: ciuill ſocietie is to be maintained, and the diſturbers thereof to be puniſhed: theſe and ſuch like Propoſitions are naturally receiued of all men as infallible verities. Againe, of Principles, ſome be called Generall, and ſome Proper. The Generall, be thoſe that may be applied to many Sciences, as theſe: the whole is more then any of his parts, if equall be taken from equall, equall doe remaine and ſuch like. The proper Principles bee thoſe, that are properly belonging to ſome one certaine Science, as a line to be a length without breadth, is a principle of Geometrie: Againe, this propoſition, euery thing is, or is not, is a principle of Logick: and to be ſhort, euery Science hath his proper principles: of which ſome bee called dignities or Maximes, and ſome Poſitions.

Wherefore are they called Dignities or Maximes?

For that they are worthy to be credited for their ſelfe ſake, for ſo ſoone as we heare them in ſuch ſpeech as we vnderſtand, wee naturally know them to bee true without any further proofe, as theſe. Take equall from equall, and equall will remaine: the whole is more then any of his parts, &c.

What be Poſitions?

Poſitions be thoſe principles, which although they need no other proofe, yet they be not ſo eaſily vnderſtood of all men at the firſt vttering, as Maximes bee: for in theſe, beſides the knowledge of the termes, it is needfull to haue alſo ſome experience, as in theſe Principles. Euery thing that is compounded of matter and forme is moueable: whatſoeuer is heauie, tendeth naturally downeward, and whatſoeuer is light, tendeth vpwards. Againe, of Poſitions, ſome are called Definitions, and ſome Suppoſitions, and of Suppoſitions, ſome are called Petitions, called in Latine *Poſtulata*, and ſome Suppoſitions aſſumpted.

Define

Define theſe kindes.

1 Definition ſheweth what the thing is.

2 Suppoſition is that which ſuppoſeth a thing to be, or not to be, as the Geometricians do ſuppoſe that there is *Punctum*, (that is to ſay) a pricke, or a thing indiuiſible, hauing neither length, bredth, nor depth.

3 Petition is a Propoſition asked and granted to be true: as this is a petition in Geometry, that a man may draw a right line from one point to another.

4 Suppoſition aſſumpted is, when a manifeſt ſuppoſition is aſſumpted to proue another thing withall, as to proue that demonſtration conſiſteth of true Propoſitions, the diſputer will aſſumpt this aſſertion, which ſaith, that of falſe things there is no certaine knowledge: and trueth is not knowne but of true things.

What is the third thing wherof the certaintie of mans knowledge dependeth?

It is the knowledge that man hath in iudging of conſequents, which is not altogether artificiall, but partly naturall, for God thought it not ſufficient for mans behoofe to know ſimple Propoſitions, as principles or common conceptions gotten by experience, vnleſſe hee could alſo compare them together, and ioyne things like, and agreeable together, and ſeuer things vnlike, and diſagreeing one from another, and by ſuch compariſon and compoſition to finde out things before not knowne: and to the intent wee ſhould not erre or wander out of the right way, God hath ſhewed vs an order, and preſcribed certain bounds and limits of neceſſitie to be obſerued in ſuch compoſition, which bounds are Syllogiſmes rightly made: for ſo do the Conſequents plainly appeare: And becauſe that proportions are knowne by nature, it ſhall not be amiſſe to giue you an example in numbers: for three knowne numbers being placed in true order of a Syllogiſme, a fourth number vnknowne, of neceſſitie doth follow, as in this queſtion: If one pound of waxe be worth a groat, what is tenne pound of waxe worth? Marrie ten groates, which is prooued by a Syllogiſme in this manner: Euery pound of

waxe is worth a groat, but here is ten pound of waxe: *Ergo*, they are worth ten groats: and like as in theſe kindes of Syllogiſmes Arithmeticall, the proportion which is to be iudged by mans naturall knowledge, doth ſhewe the Conſequent to be infallible, euen ſo the Conſequents in other Syllogiſmes are ſhewed to be infallible, by ſuch demonſtrations as are not farre fetched, or doubtfull, but are manifeſt, plaine and euident.

CHAP. XIX.

Of the two kindes of Demonſtration.

How doe the Schoolemen diuide Demonſtration?

Into two; that is, perfect and vnperfect: and they call the perfect, *demonſtratio propter quid*: and the vnperfect, *demonſtratio quia eſt*.

It is perfect, when it proceedeth from the proper cauſe to the effect, called of the Schoolemen, *à priore*: for in that demonſtration the Antecedent containeth the proper and true cauſe of the conſequent; as when we ſay, the Sun is vp: *Ergo*, it is day.

What is to be obſerued in a perfect Demonſtration?

That the Predicate of the Concluſion, which is alſo Predicate in the Maior, be firſt, properly, alwayes, and that really and accidentally, incident to the ſubiect of the Maior, and to euery thing contained vnder the ſame, which ſubiect muſt bee ſome generall kind, and the very meane or proofe of your concluſion: As for example, if you would prooue a Cocke to be a feathered fowle, it were not a ſufficient demonſtration to ſay, that euery flying beaſt is a feathered fowle; for ſome beaſtes flie, that haue no feathers; as Backs, that flie in the night ſeaſon. But if you ſay, that euery bird is a feathered fowle, & euery Cocke is a bird: *Ergo*, euery Cocke is a feathered fowle: you ſhall make a perfect demonſtration, becauſe the Subiect, and Predicate of the Maior, haue ſuch conditions as are before required; for this Maior ſheweth the thing to be, and alſo wherfore it is, which is done ſo often as the Predicate is the true definition

finition of the Subiect: as when I ſay, Euery man is a ſenſible body endued with reaſon, or elſe ſome chiefe part of the definition, as when I ſay, Euery man is endued with reaſon, as hath been ſaid before: for euery good demonſtration is either made of a true definition, or taken frō the general kind, ſpecial kind, or elſe from the ſpeciall difference, or propertie, yea, and ſometime they may bee taken out of the whole and of the parts, of the proper cauſes and effects, of perpetual adiacents, otherwiſe called common accidents, of proper acts, of contrarieties, and of diuine authoritie, whereof you haue had examples before in the treatiſe of places, and ſeates of arguments.

When is it ſaid to be an vnperfect Demonſtration?

When the premiſſes are true, implying a true Conſequent, but yet are not firſt, neither doe they ſhew the originall cauſe of the Concluſion; as in this example: Euery ſenſible body is nouriſhable; but euery man is a ſenſible body: *Ergo*, euery man is nouriſhable: here though the premiſſes be true Propoſitions, yet they be not firſt, neither doe they ſhew the original cauſe of the Concluſion: for the Maior of this Syllogiſme may be proued by a former and more knowne Propoſition; for that which is more generall, is more knowne then that which is leſſe generall, as thus: Euery liuing body is nouriſhable; but euery ſenſible body is a liuing body: *Ergo*, euery ſenſible body is nouriſhable. Againe, it is ſaid to be vnperfect, when we proceed from the effect to the cauſe; as when we ſay, it is day: *Ergo*, the Sunne is vp. But that demonſtration which proceedeth from the cauſe to the effect, is the more worthier, becauſe we vſe therein diſcourſe of reaſon and vnderſtanding: and in the other we onely iudge by the outward ſences, whereof ſpring two principall kindes of Methode, (that is to ſay) compendious or ſhort orders or wayes of teaching in all manner of Sciences whereof the one is called compoſition, proceeding forward from the firſt to the laſt, and the other is called reſolution, proceeding backward from the laſt to the firſt, as hath been ſaid before in the Methode. *Lib. 2. cap. 5.*

CHAP.

CHAP. XX.

Of Science, Opinion, Ignorance, Witte, and of the foure Sciencial queſtions.

WHat other things are wont to bee treated of by the Schoolemen in demonſtration?

Diuers things; as what difference is betwixt Science and Opinion: alſo they treate of the diuers kindes of Ignorance, of prompt Witte: and of the foure Scienciall queſtions.

What difference is betwixt Science and opinion?

Science, as hath been ſaid before, is that which conſiſteth of neceſſary, certaine, and infallible Propoſitions, and of ſuch things as cannot be otherwiſe. Opinion is the knowledge of things caſuall, which may bee ſometime falſe, and ſometime true.

How many kindes of Ignorance doe the Schoolemen make?

Two: that is to ſay, abſolute, which of the Schoolmen is called *Ignorantia negationis*, and ignorance by falſe conception, which they call *Ignorantia affectionis*. The firſt is, when we vtterly denie to haue any knowledge of a thing at all: The other is, when we thinke to know that which we know not, being deceiued by ſome falſe perſwaſion, whereunto we are affected, whereof it is called *Ignorantia affectionis*.

How doth Ariſtotle *define prompt Witte, called of the Latines Solertia?*

He defineth it to be a promptneſſe or readineſſe, in quickly finding out the proofe or cauſe of any thing that is in queſtion, without any ſtudie.

Which be the foure Scientiall queſtions?

Theſe: whether the thing be, what it is, how it is, and wherfore it is: whereof the firſt enquireth of the Subiect, whether it be: the ſecond of the Predicate, as what it is: the third, how it is, (that is to ſay) how the Predicate is ſpoken of the Subiect: and the fourth asketh the cauſe why it is ſpoken of the Subiect? And thus much of a Syllogiſme Demonſtratiue: now of a Syllogiſme Dialecticall, or probable.

CHAP.

CHAP. XXI.

Of a Syllogiſme Dialecticall.

What is a Dialecticall Syllogiſme?

A Dialecticall Syllogiſme is that which is made of probable and credible Propoſitions.

What things are ſaid to be probable?

Things probable, according to *Ariſtotle*, are theſe that ſeeme true to all men, or to the moſt part of men, or to all wiſe men, or to the moſt part of wiſe men, or elſe to the moſt approued wiſe men: whereby it appeareth that things probable may be ſaid fiue manner of wayes.

Shew how.

Firſt, thoſe things are probable, which vnto all men aſwell learned as vnlearned being in their right wits, doe ſeeme to be true, as theſe: Euery mother loueth her childe: we loue them that loue vs: we muſt doe good to them that doe good to vs. Secondly, thoſe things that ſeeme true to moſt men, as theſe: it is better for a communalty to be ruled by one Prince, then by many: It is not good to ſerue many maſters at once. Thirdly, thoſe things that ſeeme true to all wiſe men, as theſe: what thing ſoeuer is honeſt, the ſame is alſo profitable: Vertue is better then riches. Fourthly, thoſe that ſeeme true to the moſt part of the wiſe and learned, as thus: the ſoule of man is immortall: the Sunne is greater then the earth. Fiftly, thoſe things that ſeeme true to the moſt approued wiſe men, as theſe: The world had a beginning: it is better for a Prince to be loued, then feared of his Subiects. And generally vnder things probable are contained all true Propoſitions that be caſuall, and not implying any neceſſitie. I ſay here true Propoſitions, to exclude falſe Propoſitions, whereof Sophiſticall Syllogiſmes are made, and not thoſe which we call probable or Logicall Syllogiſmes; and yet ſuch Propoſitions be not ſo true in deede, as thoſe that bee required in a Syllogiſme demonſtratiue, but onely doe ſeeme true, ingendring a certaine opinion in mans minde, doubting notwithſtanding the contrary: for

it breedeth not a perfect knowledge as Science doth, whereby the minde is of all doubts throughly resolued. And note here, that the Schoolemen doe make the matter (whereof a Dialecticall Syllogisme doth consist) to be twofold, that is, *Materia remota*, in English, farre off: and *Materia propinqua*, (that is to say) nigh, or neere at hand.

What doth Materia remota containe?

These foure Dialecticall Predicates, (that is) Definition, called of the Schoolemen *Terminus*, property, generall kinde, and Accident: All which Predicates are before defined, and are called Predicates, because they are common words spoken of others. But truely I see no cause why these foure Predicates should be attributed to a Dialectical Syllogisme, more then to a Syllogisme demonstratiue: for sure I am, that as good demonstrations may be made of these as of any other Predicats.

What is contained vnder Materia propinqua?

These: a Dialecticall Proposition, Probleme, and Position.

What difference is betwixt these three words, Dialecticall Proposition, Probleme, and Position?

A Dialecticall Proposition is a probable question vttered with a simple Interrogatory; as whether the mother loueth her childe? which is no question in deede, but to him that asketh.

A Probleme is a doubtfull question vttered with a double Interrogatory, as whether the least fixed starre in the firmament be greater then the Moone or not? or whether that the Sunne be bigger then the earth or not? Position is a wonderfull opinion maintained by some excellent Clerke, as to say, that all things are but one essence or being, as *Melissus* affirmed, or that all things doe continually flowe and change, as *Heraclitus* held, or that the earth moueth, and not the heauens, as *Copernicus* supposeth, onely to finde out thereby the true motions of the Planets, and not for that he thought so in deed.

CHAP.

CHAP. XXII.

Of a ſophiſticall Syllogiſme.

What is a Sophiſticall or falſe Syllogiſme?

A falſe Syllogiſme is that which is either made of falſe Propoſitions, or elſe of ſuch as ſeeme probable, and be not in deede, or elſe of probable premiſſes not rightly concluding: and of ſuch Syllogiſmes there be three ſortes, the one failing in matter, the other in forme, the third in both.

When is it ſaid to faile in matter?

It faileth in matter, when the Syllogiſme hauing true forme, is made of ſuch Propoſitions as ſeeme probable, and bee not probable in deede, as thus: no oppoſites are both true at once, but ſubcontraries are oppoſites: *Ergo*, they are not true. Here though this Maior ſeemeth probable, becauſe many oppoſites, as contraries, and contradictories be neuer both true at once, yet it is not probable in deede: for thoſe oppoſites which be called ſubcontrarie and ſubalternate, may bee both true at once as hath been before.

When is it ſaid to faile in forme?

It faileth in forme, when it is made of probable premiſſes, not rightly concluding: becauſe they be not orderly diſpoſed according to Moode and Figure, as thus: Some oppoſites are both true at once, but contradictories are oppoſites: *Ergo*, Contradictories are both true at once. Here the premiſſes be probable, but the Syllogiſme halteth in forme, becauſe that of meere particulars no good concluſion can follow.

When is it ſaid to faile both in matter and forme?

It faileth both in matter and forme, when the premiſſes are neither probable, nor yet doe conclude rightly according to the rules of Logicke, as thus: No oppoſites are both true at once, but ſubcontraries are oppoſites: *Ergo*, no ſubcontraries are both true at once. Here firſt it faileth in matter, becauſe the Maior, (as hath been ſaid before) is not probable in deed. Againe, it faileth in forme, becauſe that contrary to the rules of a

Syllogiſme, an vniuerſall concluſion is implied, one of the premiſſes being particular, which ſhould not be.

Is there no other kindes of falſe Syllogiſmes?

Yes, there is another kinde of falſe Syllogiſme, called of *Ariſtotle*, *Syllogiſmus falſigraphus*, which proceedeth of the proper principles of ſome diſcipline, miſconſtrued, or not rightly vnderſtood, as thus: All lines drawne from one ſelfe-point to another ſelfe-point, be equall, a right line and a crooked line be drawne from one ſelfe-point to another ſelfe-point: *Ergo*, a right line and a crooked line be equal, as you ſee in the figure *a.b* in the Margent: Here the Maior being a principle in Geometrie, is not rightly vnderſtood; for the right meaning of the principle is, that the lines ſhould be alſo drawn in one ſelfe ſpace, and then they muſt needes be equall, (that is to ſay) all of one length: but as touching falſe Syllogiſmes, wee ſhall treate of them hereafter more at large in the Elenches: in the meane time we minde to ſpeake of the other kindes of arguments before mentioned; and firſt of Induction.

CHAP. XXIII.

Of Induction.

What is Induction?

Induction is a kind of argument, wherein we proceede from many particulars to a vniuerſall concluſion, comprehending all the ſaid particulars: and by the particulars here I mean not only ſingularities, called in Latine *Indiuidua*, but alſo ſuch things as be leſſe common then that vniuerſall which is concluded; as when we proceed from many ſpeciall kinds, to ſome generall kinde comprehending the ſame, or from things leſſe common to more common.

What is to be obſerued in this kind of reaſoning?

That the particulars be all of like nature; for if there be any one contrary or vnlike to the reſt, then the Induction is not good.

How manifold is Induction?

Twofold

Twofold: Perfect, and Vnperfect: it is called perfect, when all the ſingularities are rehearſed: and vnperfect, when but ſome certaine parts are only recited.

Giue example of Induction.

Of an Induction, proceeding from meere ſingularities vnto vniuerſall, let this be your example: Malmeſie is hot, Gaſcoin wine is hot, Romney wine is hot, Sack is hot, Reniſh wine is hot, French wine is hot, *& ſic de ſingulis: Ergo*, Euery wine is hot; which may bee brought into a Syllogiſme thus: Euery thing that is wine, be it eyther of *Greece*, *Spaine*, *Italy*, *Germany*, *France*, or of any other countrey is hot, but euery wine is one of theſe: *Ergo*, euery wine is hot.

Giue example of an Induction proceeding from the ſpeciall kinds to their generall kinds?

Of an Induction proceeding from the ſpeciall kindes to the generall kind, let this be your example: Euery Man hath mouing, euery Horſe hath mouing, euery Oxe hath mouing, *& ſic de ſingulis: Ergo*, euery ſenſible body hath mouing. In which example you ſee, that to euery ſpeciall kinde is added an vniuerſall ſigne to make your Induction good, which would not be ſo, if you ſhould vſe a particular ſigne, in ſaying, ſome Man, ſome Horſe, ſome Oxe, and ſo forth.

Which of theſe two kindes of reaſoning, eyther an Induction or a Syllogiſme is moſt familiar and eaſie to man?

Induction is more familiar to man then a Syllogiſme, for the Syllogiſme proceedeth from vniuerſalities vnto particularities, which vniuerſalities be more knowne to nature (that is to ſay) to the diſcourſe of reaſon, and leſſe knowne to our outward ſences. But Induction proceedeth from particularities vnto vniuerſalities, which particularities are more knowne vnto vs, (that is to ſay) to our outward ſences, and leſſe knowne to Nature. Againe, by Induction wee are able to proue the principles of Demonſtration, which are not otherwiſe to bee proued, as this principle: Euery whole is more then his part, may be proued by Induction in this ſort: This whole is more then his part, and that whole is more then his part, neyther is there to be found any whole, but that is more then his part:

Ergo, Euery whole is more then his part. Alſo this principle, Euery ſenſible bodie endued with reaſon is apt to learne, may be proued thus: This man is apt to learne; and that man is apt to learne, and ſo of the reſt: *Ergo*, Euery ſenſible body endued with reaſon is apt to learne.

CHAP. XXIIII.

Of an Enthimeme.

What is an Enthimeme?

An Enthimeme is an vnperfect Syllogiſme, made for haſte or ſpeed of two Propoſitions only, (that is) of one of the Premiſſes, called in this kind of argument the Antecedent, and of the concluſion called heere the Conſequent, for the other of the Premiſſes being ſuppoſed to be true and well knowne, is left out of purpoſe, as a thing ſuperfluous, and not needfull to be recited, and ſometime the Maior is left out, as thus: Voluptuouſneſſe is not perpetuall nor proper, it is not therefore the chiefe felicitie: and ſometime the Minor is left out, as heere: Euery good thing maketh his poſſeſſor the better, therfore voluptuouſneſſe is not good.

How ſhall a man know when the Maior or Minor is left out?

It is eaſie to know which of the Premiſſes is left out by this meanes, for if the Subiect of the Antecedent and of the Conſequent be all one, then the Maior is left out, but if they bee not all one, but diuers, then the Minor is left out, as you may ſee in the two laſt examples, and the part lacking, being reduced together with the reſt into a Syllogiſme, will quickly ſhew the truth or falſehood of the Argument.

From whence are ſuch kindes of Arguments gathered?

They are gathered for the moſt part from ſignes, which if they be neceſſarie, then the Enthimeme alſo is neceſſarie, as thus: The woman giueth milke: *Ergo*, ſhee hath had a childe, or is with childe; if the ſignes be probable, then the Enthimeme is alſo probable, as thus: This man is a night-gadder: *Ergo*, he is a thiefe.

CHAP.

CHAP. XXV.

Of an Example.

What is an Example?

An Example is a kind of Argument, wherein wee proceed from one particular to proue another particular, by reaſon of ſome likenes that is betwixt them, as thus: God did not puniſh the Niniuites becauſe they repented: *Ergo*, Hee will not puniſh vs if we repent. God did not let to plague King *Dauid* for adulterie: *Ergo*, He will not let to plague any other King for committing the ſame offence.

Wherein differeth this kinde of Argument from the reſt?

This kinde of Argument differeth in forme from all the reſt before taught, for a Syllogiſme proceedeth from the generall kinde to the ſpeciall kinde, or otherwiſe. An Enthimeme imitating a Syllogiſme, reciteth in his Antecedent the cauſe of the Concluſion. Againe, an Induction out of many particularities gathereth an vniuerſalitie, none of which things is to be found in an Example, proceeding onely from one particular to another like particular. Notwithſtanding *Ariſtotle* ſaith, that it may be reduced partly to an Induction, and partly to a Syllogiſme: for in taking the firſt particular, you may by an vnperfect Induction imply an vniuerſall Propoſition. And ſo from that vniuerſall Propoſition to proceed by order of Syllogiſme vnto the other particular implyed in the concluſion of the Example, as in this Example: *Iudas* died euill: *Ergo*, *Pilate* alſo died euill: it may be firſt reduced into an vnperfect Induction thus: *Iudas* dyed euill, becauſe hee was the author of Chriſts death, and did not repent: *Ergo*, Euery man that was author of Chriſts death, and did not repent, died euill. Into a Syllogiſme thus: Euery man that was author of Chriſts death, and did not repent, died euil; but *Pilat* was author of Chriſts death, and did not repent: *Ergo*, *Pilate* died euill.

Whereto ſerues this kinde of reaſoning by Example?

Exam-

Examples are very good in all morall matters, to perſwade, or diſſwade.

What is to be obſerued in reaſoning by way of Example?

You muſt in any wiſe be ſure that the ſimilitude or likeneſſe of the particulars doe make to the purpoſe which you intend, and that it be the very cauſe why the Predicate of the Antecedent properly belongeth to the Subiect, for otherwiſe the argument is not good; for if you ſhould reaſon thus: *Iudas* died euill: *Ergo*, *Peter* died euill: becauſe they were both ſinners: for their likenes in this behalfe is not the cauſe that *Iudas* died euill, but the cauſe before alledged.

From whence is this kinde of argument fetched?

From the places of Compariſon, as from the like, from the more, and from the leſſe, of all which the generall rule or Maxime is thus: In things like, is like iudgement or reaſon, as hath beene ſaid before in the Treatiſe of Places. Thus farre of the foure principall kinds of reaſoning: now of the reſt, and firſt.

CHAP. XXVI.

Of the Argument called Sorites.

What is Sorites?

WHat is Sorites is a kinde of Argument proceeding as it were by certaine degrees vnto the Concluſion, which is gathered of many Propoſitions neceſſarily following one another, and are knit together, ſo as the Predicate of the firſt Propoſition is the Subiect of the ſecond, and the Predicate of the ſecond the Subiect of the third, and ſo forth euen to the laſt Propoſition, whoſe Predicate being ioyned to the Subiect of the firſt Propoſition, doth make the Concluſion as thus: The Soule of man doth moue it ſelfe: whatſoeuer moueth it ſelfe, is the beginning of mouing: the beginning of mouing hath no end, whatſoeuer hath no end, is immortall: *Ergo*, the Soule of man is immortall.

When

When is this kinde of Argument ſaid to be of force?

When it is made of Affirmatiue Propoſitions, wherein words of affinitie are neceſſarily ioyned together, as when kindes generall, differences, or properties, are ioyned with thoſe ſpeciall kindes, of whom they are ſpoken, or when proper effects are ioyned with their proper cauſes, for if the Propoſitions be eyther Negatiue, or doe not neceſſarily hang together, then it is no good Argument, as in Negatiues let this be your example: A Man is not a Lion, a Lion is a ſenſible beaſt: *Ergo*, Man is not a ſenſible beaſt. Now of Propoſitions not hanging neceſſarily together, becauſe that proper effects are not ioyned with their proper cauſes, let this common ieſt be your example:

Whoſo drinketh well, ſleepeth well,
Whoſo ſleepeth well, ſinneth not,
Whoſo ſinneth not, ſhall be bleſſed:
Ergo, *Whoſo drinketh well, ſhall be bleſſed.*

Which is no good Concluſion, for much drinke is not alwayes the cauſe of ſleepe, nor ſleeping the cauſe of not ſinning.

The Rhetoricians vſe another kinde of Argument, called *Gradatio*, which is much like to *Soritес*, ſauing that the Subiect of the firſt Propoſition is not rehearſed in the Concluſion, for they vſe it rather as an ornament of ſpeech, then as a proofe, as the vertue of SCIPIO wanne him Fame, Fame got him Enemies, and his Enemies procured his death.

CHAP. XXVII.

Of diuers other kindes of Arguments, and firſt of a Dilemma, and what kindes it comprehendeth.

There be alſo other formes of Arguments, whereof ſome be Fallaxes, and ſome are good Concluſions, and they be theſe, Dilemma, Enumeratio, Simplex Concluſio, Subiectio, Oppoſitio, Violatio.

What is Dilemma?

Dilemma is an Argument made of two members, repugnant one to another, whereof which ſoeuer thou granteſt, thou art by and by taken, as thus: It is not good to marrie a wife, for if ſhee be faire, ſhee will be common, if foule, then loathſome: notwithſtanding, this is but a ſlipperie kinde of argument, vnleſſe both the repugnant parts be ſuch, as neyther of them can bee turned againe vpon the maker of the argument, for then by conuerſion, the *Dilemma* is ſoone confuted, as for example, you may conuert both parts of the argument laſt recited thus: It is good to marry a wife, for if ſhe be faire, ſhe ſhall not be loathſome, if foule, then not common: much like to this is that captious Argument, which *Protagoras* the Lawyer made againſt his Scholler *Euathlus*, who had couenanted to pay his Maſter a certaine ſumme of mony at the firſt Suite or Action that he ſhould winne by pleading at the Law: whereupon his Maſter did afterwards commence an Action againſt him, and in reaſoning with him of the matter, made him this *Dilemma:* Eyther (ſaith he) iudgement ſhall bee giuen againſt thee, or with thee: if againſt thee, then thou muſt pay me by vertue of the iudgement; if iudgement bee giuen with thee, then thou muſt alſo pay me by couenant; which the Scholler immediately confuted by conuerſion in this ſort: Eyther (ſaith he) iudgement ſhall be giuen with me, or againſt me; if with mee, then I ſhall bee quit by Law; if againſt mee, then I ought to pay nothing by couenant.

What other intricate kindes of reaſoning are ſaid to be comprehended vnder Dilemma?

Diuers, whereof ſome be called Ceratins or horned Arguments, ſome Crocodolites, ſome Aſſiſtatons, ſome Pſeudomenons.

Define all theſe kindes, and giue examples.

1 The horned Argument is, when by ſome ſubtile and craftie manner of queſtioning, we ſeeke to haue ſuch an anſwere, as we may take vantage therof, as the Phariſes did, when they queſtioned with Chriſt touching the payment of Tribute to *Caſar*.

2 The Crocodolite is, when being deceiued by ſome craftie manner of queſtioning, we doe admit that which our Aduerſary turneth againe vpon vs, to our own hindrance, as in the fable of the Crocodile, whereof this name Crocodolite proceedeth: for it is ſaid, that the Crocodile hauing taken away a childe from his mother, reaſoned with her in this ſort; I will deliuer thee thy childe againe, if thou wilt ſay a troth: whether therfore ſhall I deliuer him or not? The mother anſwered, thou ſhalt not deliuer him, and therefore of right thou oughteſt to deliuer him. No, ſaith he, I will not deliuer him, to the intent it may ſeeme that thou haſt ſaid troth; and though thou haddeſt ſaid that I ſhould deliuer him, yet I would not deliuer him indeed, for making thee a lyar.

3 Aſſiſtaton, is a kinde of cauelling, not conſiſting of any ſure ground, as if a man did ſay, that he doth hold his peace, or lyeth, or knoweth nothing; another by and by might cauill thereof in this ſort: *Ergo*, He that holdeth his peace, ſpeaketh, he that lyeth, ſaith truth, he that knoweth nothing, knoweth ſomething.

4 Pſeudomenon, is a falſe or lying kinde of cauelling, as thus: The heauen couereth all things: *Ergo*, it couereth it ſelfe. *Epimenides*, being a Candiot himſelfe, ſaid, That the Candiotes were lyers; the queſtion is, whether he ſaid true or not; for though he ſaid true, and that the Candiotes were lyers, yet it is falſe, becauſe a Candiot ſaid it: againe, if the Candiotes be no lyers, nor *Epimenides* is a lyer, then hee is to be beleeued.

How are the Fallaxes of theſe captious Arguments to be found out?

The Fallaxes of all theſe kindes of captious Arguments are ſoone found out, if wee conſider well the rules before taught, touching the repugnances of Propoſitions, as whether there be any ambiguitie in the Termes, and whether the ſelfe-ſame Termes in the repugnant parts haue reſpect to one ſelfe-thing, time, or place, or not: it is good alſo to conſider the ſubſtance, quantitie, and qualitie of the Propoſitions: for in the laſt example, this ſaying Candiotes be lyers, is a Propoſition indefinite, and therefore is not of ſuch force, as to ſay, all Candiotes be lyers, which is an vniuerſall Propoſition, for of particular Premiſſes nothing rightly followeth. In the other examples you ſhall finde that there is ſome doubtfulneſſe in the Termes, hauing reſpect eyther to diuers things, to diuers times, or diuers places, as to ſay, he holdeth his peace when he ſpeaketh: Heere is doubtfulneſſe in the Termes, hauing reſpect to diuers things, that is to ſay, as well to thoſe things, which hee meaneth to keepe in ſilence, as to thoſe words which hee vttereth by mouth: ſo in this word, Suite, in the example of *Protagoras* was doubtfulneſſe, for that *Protagoras* meant ſome other Suite, and not that which he himſelfe commenced.

CHAP. XXVIII.

Of Enumeration.

What is Enumeration?

Enumeration is a kinde of Argument, wherin many things being reckoned vp and denied, one thing onely of neceſſitie remaineth to bee affirmed, as thus: Sith thou haſt this Horſe, eyther thou didſt buy him, or he came to thee by inheritance, or hee was giuen thee, or bred at home with thee, or elſe thou didſt take him from thine enemie in time of warre; or if none of theſe were, then thou muſt needs ſteale him: but thou neyther boughteſt him, nor he fell not vnto thee by inheritance,

nor

nor was giuen thee, nor bred vp at home with thee, nor yet taken by thee from the enemie: it followeth therefore of neceſſitie that thou haſt ſtolne him.

When is this kind of argument to be confuted?

When your aduerſary can prooue any neceſſary part to bee left out.

CHAP. XXIX.

Of a ſimple Concluſion.

What is a ſimple Concluſion?

A ſimple Concluſion is no other thing, but a neceſſary Enthymeme, in the which the Conſequent doth neceſſarily follow the antecedent, as thus: ſhee hath had a childe: *Ergo*, ſhe hath layne with a man.

CHAP. XXX.

Of Subiection.

What is Subiection?

Subiection is a queſtioning kinde of Argument, in the which wee confute each queſtion with a reaſon immediatly following the ſame, as thus: How is this fellow become ſo wel moneyed? had he any great Patrimonie left him? No, for all his Fathers lands were ſold. Came there any inheritance to him by diſcent any otherwiſe? No, for hee was diſinherited of all men. Came there any goods vnto him by Executorſhip, &c. If then hee hath not been enriched by any of theſe honeſt wayes, either he hath a golden Myne at home, or elſe hee is come to theſe riches by ſome vnlawfull meanes. This argument faileth when any principall part is left out, and therefore differeth not much from Enumeration before recited.

CHAP. XXXI.

Of Oppoſition.

What is Oppoſition?

Oppoſition is a kind of Argument, made of Repugnant parts, wherein we reuert from the Oppoſite of the firſt Propoſition, vnto the ſame Propoſition againe, as thus: If I were in the Citie at ſuch time as this man was ſlaine in the Countrey, then I ſlew him not; this Propoſition is now a ſimple Concluſion, and may be made an Oppoſition in this maner: If I had been in the Countrey at ſuch time as you ſay this man was ſlaine, then you might well ſuſpect mee to haue ſlaine him: but ſith I was not there at that time, there is no cauſe therefore why you ſhould ſuſpect mee.

CHAP. XXXII.

Of Violation.

What is Violation?

Violation is a kinde of Concluding, more meete to confute then to prooue, whereby we ſhew the reaſon of our aduerſarie, to make for vs, and not for him, as thus: it is not good to marrie a wife, becauſe that of marriage many times commeth the loſſe of children to our great ſorrow, yea, rather it is good therefore to marrie a wife, to get other children for our comfort. Thus much touching the diuers kindes of reaſoning: now we will treate of Fallaxes, or falſe Concluſions, and ſhew how to confute them.

Heere endeth the fift Booke of Logick.

THE

THE SIXT BOOKE
OF LOGICKE.

CHAP. I.

Of Confutation.

THere be ſome that make two kinds of Confutation, the one belonging to perſon, the other to matter. Confutation of perſon is done either by taunting, rayling, rendring checke for checke, or by ſcorning, and that either by wordes, or elſe by countenance, geſture and action: which kinde of Confutation, becauſe it belongeth rather to ſcoffing then to true order of reaſoning, I will leaue to ſpeake thereof, dealing onely with that Confutation that belongeth to matter, which is two-fold, the one generall, the other ſpeciall: it is generall, when wee affirme that the Argument faileth either in forme, in matter, or in both. Againe, the generall Confutation is done three manner of wayes, that is, either by denying the Conſequent, by making diſtinction, or by inſtance, (that is to ſay) by bringing in a contrary Example.

Shew when theſe three wayes are to be vſed.

If the Argument faile in forme, then wee muſt denie the conſequent.

Giue Examples.

Diſcipline

Diſcipline is neceſſarie, but the Ceremonies of *Moſes* are diſcipline, therefore the Ceremonies of *Moſes* are neceſſary: here you muſt denie the Conſequent, becauſe that of meere particulars nothing followeth: and to be ſhort, when any Argument is made contrary to the rules of Figure and Moode before taught, the Conſequent is not good, and therefore to bee denied, as here: euery couetous man doth violate the lawes of liberalitie; but euery prodigall man doth violate the lawes of liberalitie; therefore euery prodigall man is a couetous man: This Syllogiſme, being of the ſecond Figure, is made in *Barbara*, which Moode belongeth not to that Figure: But if the Argument fayle in matter, that is, when either one of the premiſſes, or both are falſe, then it may be confuted aſwell by denying the falſe part, bee it Maior or Minor, as by vſing diſtinction: and to finde out the falſeneſſe of the matter, it is neceſſary alwayes to haue reſpect to the Maxims of the places, from whence the proofe is fetched; for they doe ſhew which Propoſitions are true, and which are not; as for example in this Argument: No painted ſpeach becommeth Philoſophers, but eloquence is painted ſpeach: *Ergo*, eloquence becommeth no Philoſophers: here the Maior is to bee denied, becauſe it is a falſe definition: for the true definition of eloquence is to ſpeake wiſely, aptly, adornedly, and to the purpoſe, and not to vſe painted wordes vainely: Againe, whoſo worſhippeth God the Creator, worſhippeth the true God; the Turkes worſhip God the Creator: *Ergo*, the Turkes worſhip the true God: This Argument is to be denied, becauſe the Minor is falſe; for no man can truely worſhip God the Creator, vnleſſe he worſhip alſo Ieſus Chriſt his Sonne, which the Turkes doe not, and therefore they worſhip a fained Idole, and not the true God.

When is diſtinction to be vſed?

When either the words or matter is doubtfull.

Giue examples of both.

All Verbes actiue doe ſignifie action, but God vſed this Verbe Actiue *Indurabo*, in ſaying, I will harden *Pharaohs* heart: *Ergo*, God did harden *Pharaohs* heart: here diſtinction

on is to bee made; for Verbes actiue haue diuers ſignifications, according to the diuerſities of the Tongues wherein they are vttered: for in the Hebrew Tongue, Verbes actiue doe ſignifie permiſſion or ſufferance, aſwell as action; as theſe wordes I will harden *Pharaohs* heart (is as much to ſay) as I will ſuffer *Pharaohs* heart to bee hardened; likewiſe whereas wee ſay in the Lords Prayer, Leade vs not into temptation, is as much to ſay, as, ſuffer vs not to bee led into temptation: Againe, ambiguitie may bee in this matter, as thus: no ſinnes are heard of God: but all men are ſinners; therefore no men are heard of God: here diſtinction is to be made betwixt penitent ſinners, and impenitent: for God will he are the penitent ſinner: although hee will not heare the impenitent ſinner.

When is confutation by inſtance vſed?

When the Argument, though it faile neither in forme, nor matter, yet perhaps it is neither ſo ſtrong, nor ſo probable, but that a ſtronger and more probable may be made againſt it.

Giue example.

Whoſo killeth any Ambaſſadours in their iourneying, doth violate the Lawes of Armes: but the Frenchmen killed our Ambaſſadour iourneying to Spaine: *Ergo*, the Frenchmen in ſo doing did violate the Lawes of Armes: Here to the Maior a man may anſwere by inſtance, thus: the Athenians killed the Ambaſſadours of the Lacedemonians iourneying to the Kings of *Perſia*, becauſe they went to procure his aide, to deſtroy the Citie of *Athens*: So likewiſe the Romanes did intercept the Legates of *Hanibal* going to the King of the Macedonians for the like intent; and yet neither of theſe people did thinke to breake the Lawes of Armes, by doing that which ſhould preſerue their State and Common-weale.

CHAP. II.

Of speciall confutation.

What is speciall confutation?

WHat is speciall confutation, when we confute any false argument, by detecting and shewing the Fallax thereof, naming the Fallax by his proper name.

What order doth Aristotle observe in treating of speciall Confutation?

Aristotle first treateth in generall of all those things that commonly appertaine to the disputations of learned men, as first he treateth of an Elench, which is asmuch to say as reprehension, then of Syllogismes, and of disputation, and also of the markes and endes of Sophistry, and whereto they tend.

How definet h he an Elench or Reprehension?

Reprehension or Elench (sayeth he) is a Syllogisme which gathereth a conclusion contrary to the assertion of the respondent, as if a man would defend *Medea*: not to loue her childe because she killed it, another might reason against him in this maner: euery mother loueth her child: but *Medea* is a mother: *Ergo*, *Medea* loueth her child: the Cõclusion of this Syllogisme is contrarie to the first assertion: and note here by the way, that there be two sorts of Elenches, the one true & the other false, it is said to be true, when it rightly gathereth a cõtrary conclusion to the respondents assertion: And false, when it fayleth in any part requisite to a true Elench: of which partes wee shall speake hereafter, when we come to treate of the Fallax called Ignorance of the Elench, which is one of the fiue endes or markes whereunto Sophistrie tendeth, for a true Elench seemeth to belong vnto Dialecticall disputation, rather then to Sophisticall disputation. But now leauing to define a Syllogisme, becausе it hath beene defined before, and therefore not needfull here againe to be rehearsed, I will proceede to Disputation.

CHAP.

CHAP. III.

Of Diſputation: and how manifolde it is.

DIſputation is a contention about ſome queſtion taken in hand, either for finding out of truth, or elſe for exerciſe ſake, and there bee foure kindes of diſputation, whereof the firſt is called doctrinall, becauſe it appertayneth to Science.

The ſecond is called Dialecticall, which belongeth to probable opinion.

The third is called Tentatiue, which ſerueth to trie another mans knowledge, in any kinde of Science.

The fourth is called Sophiſticall, which tendeth onely to deceiue.

Giue examples of all theſe foure kindes?

The Doctrinal Diſputation vſeth no other but Syllogiſmes Demonſtratiue as this is, whatſoeuer hath reaſon, is capable of learning; but *Iohn* hath reaſon: *Ergo*, *Iohn* is capable of learning. Dialecticall Diſputation vſeth onely probable Syllogiſmes, as the former example of *Medea*, euery mother loueth her child; but *Medea* is a mother: *Ergo*, *Medea* loueth her childe: againſt this another probable argument may be made thus: whoſoeuer killeth her child, loueth not her childe: but *Medea* killed her child: *Ergo*, ſhe loued not her child. Tentatiue diſputation vſeth ſuch arguments as are made of the firſt common principles of any ſcience, in which principles who ſo is ignorant, cannot be ſkilful in that Science; as if a man would profeſſe Geometrie, and know not the definitions of a point, or pricke of a line, or ſuperficies, or of ſuch common Maxims, as theſe are; the whole is more then his part: take equall from equall, and equall remaine, &c. ſhould quickly bewray his owne ignorance.

Sophiſticall diſputation vſeth nothing but deceitfull arguments, or Fallaxes, whereof there be thirteene kindes hereafter ſet downe: but firſt I will ſhew you which be the fiue Markes and Ends of Sophiſtrie.

CHAP. IIII.

Of the fiue Markes and Endes of Sophiſtrie.

Ariſtotle ſaith, that the fraudulent diſputation of the Sophiſter, tendeth alwayes to one of theſe fiue Ends or Markes; that is, either by force of argument, to bring you into ſome abſurditie, which he calleth Elench; that is to ſay, a reprehenſion or reproofe, or elſe to make you to confeſſe that which is manifeſtly falſe, or to grant ſome Paradox, which is aſmuch to ſay as an opinion contrary to all mens opinions: or to allow of incongrue ſpeach contrarie to the rules of Grammar, called in Latine, *Soleciſmus*, or to admit ſome vaine repetition, called in Latine *Nugatio*.

Gine example of all theſe fiue Markes.

Of the firſt Marke, let this be your example: If in diſputing of Vertue, you haue perhaps granted, that the meditation of Vertue doth make a man ſad, the Sophiſter will force you by argument, to denie againe that which you before granted, thus: all things that bee contrarie, haue contrary effects: but it is proper to vice to make the minde of man ſad: *Ergo*, Vertue maketh his minde glad: This kinde of reaſoning is more plainely taught before, when wee talked of Reduction by impoſſibilitie.

Of the ſecond Marke let this be your example: Euery dog hath power to barke; but there is a certaine Starre called the Dog: *Ergo*, that ſtarre hath power to barke. The Fallax of this argument conſiſteth onely in the word Dogge, which is equiuoke, as ſhall bee declared more at large hereafter, when wee come to ſpeake of that Elench or Fallax.

Of the Paradox, which is the third Marke, let this be your example: the Sophiſter will make you to grant, that a rich and happie King is wretched, by force of argument, thus: Whoſoeuer is ſubiect to ſin, is wretched: but all rich and happy Kings are ſubiect to ſinne: *Ergo*, all rich and happy Kings

are

are wretched and miſerable: in this is alſo a Fallax, becauſe that happineſſe is ſpoken heere in two reſpects, for there is worldly happineſſe, and heauenly happineſſe.

Of the fourth marke called incongruitie of ſpeech, I can hardly giue you any fit example in our natiue tongue, becauſe that our Engliſh Adiectiues doe not differ in Caſe, Gender, and Number, and therefore I pray you content your ſelfe with this Latine example, for it is an eaſier matter for an Engliſhman to ſpeake falſe Latine, then falſe Engliſh: the Sophiſter will make you to allow of this falſe Latine, *mulier eſt candidus*, by force of argument thus: *Omnis homo eſt candidus, at mulier eſt homo, ergo mulier eſt candidus*; the Engliſh whereof is thus: Euery man is white, but woman is man: *Ergo*, a woman is white: heere this word white in the Latine is of the Maſculine gender, contrarie to the rules of Grammar, but this may be very wel referred to the Fallax, called forme of ſpeech, hereafter declared.

Of the fift marke called Nugation, let this be your example: the Sophiſter will make you to allow of this vaine repetition: *Plato* is learned, a man learned, by force of argument thus: *Plato* is learned, but *Plato* is a man learned: *Ergo*, *Plato* is learned; a man learned: heere the premiſſes and the concluſion are all one thing, and therefore contrarie to the rules of Logick. But leauing theſe things as ſuperfluous, and in my iudgement ſeruing to ſmall purpoſe, if I may ſo ſay without offence, I minde therefore now to returne to my matter firſt intended.

CHAP. V.

How to confute all manner of Elenches, or Fallaxes whatsoeuer they be.

EVery Fallax consisteth eyther in words or in things: and of those that consist in words, there are in number sixe, and of others consisting in things, there are seuen, so as in all there be thirteene, as I said before.

Which be those sixe that consist in words?

Equiuocation, Amphibologie, or doubtfull speech, Coniunction, Diuision, Accent, and Figure, or forme of speech.

Shew what these Fallaxes be, and giue examples?

1 *Equiuocatio.* Equiuocation is, when the deceit consisteth in the doubtfulnesse of some one word, hauing diuers significations, as for example: Euery Dogge is a sensible bodie, there is a certaine Starre called a Dogge: *Ergo*, That Starre is a sensible bodie: heere the Conclusion is to be denied, because this word Dog hath diuers significations: another example, the Prophet saith that there is no euill in the Citie, but God doth it; but there be horrible euils in the Citie: *Ergo*, God is the Author of euill: the Conclusion is to be denied, because in the Maior this word euill signifieth punishment, and in the Minor it signifieth sinne: another example, Whosoeuer loueth Christ, obserueth his word, and is beloued of the Father: but no bodie that breaketh the Law, obserueth the word of Christ; therefore no bodie is beloued of the Father: heere the Maior is doubtfull, because this voyce, Word, may be taken eyther for the word of the Law, or else for the word of the Gospell, which the Apostles did euer keepe, as Christ himselfe saith, and therefore they were beloued of the Father, and so consequently euery true Christian, that doth keepe the pure doctrine of Christ, is beloued of the Father: but the word of the Law saith, that euery one is cursed that abideth not in all.

2 *Amphibologia.* Amphibologia or doubtfull speech, is when some whole sentence

ſentence is doubtfull, and may bee interpreted diuers wayes, as the Oracle of *Apollo*, in ſaying that *Creſſus* paſſing the Riuer of *Halis*, ſhall ouerthrow a great Empire, by which Oracle was meant that hee ſhould ouerthrow his owne Empire, and not the Perſian Empire, which by wrong conſtruing that Oracle, he hoped to ſubdue.

Compoſition or coniunction, is the ioyning together of things that are to be ſeuered. As for example, two and three be euen and odde, but fiue maketh two and three, therefore fiue is both euen and odde: which kinde of argument is to be denied, becauſe thoſe things are ioyned together, which ought to be ſeuered. 3 *Compoſitio.*

Diuiſion is, when things are ſeuered, which ſhould be ioyned together, as, all the wiſe men of Greece are ſeuen: *Solon* and *Periander* are wiſe men of Greece, therefore *Solon* and *Periander* are ſeuen: heere the Conſequent is to be denied, becauſe *Solon* and *Periander* are ſeuered from the reſt whereunto they ſhould be ioyned. 4 *Diuiſio.*

The Fallax of Accent is, when words are not rightly and ſimply pronounced, as when wee doe adde to, or take from a word, any aſpiration, letter, or ſyllable, and thereby alter the true ſignification thereof, as this Latine word, *Hara*, ſignifying a Swines cote, being pronounced without *H*, doth ſignifie an Altar. In Engliſh let this be your example, Euery Hare is ſwift on foote, but this is a Hayer, (that is to ſay) a cloth to drie Mault, therefore it is ſwift on foote. Of like ſort is this old ieſt of a Maſter that ſaid to his ſeruant: Go heate this Capons legge, who immediately did eate it: then his Maſter being angry, ſaid, I bade thee heate it, with an h: no Sir (ſaid the ſeruant) I did eate it with bread. Likewiſe this Fallax may chance by not obſeruing the right quantitie of ſyllables, in any word, as *Populus* hauing o, long, is a Popple tree, but hauing o, ſhort, it ſignifieth a people. Or when a word vſed Interrogatiuely, is made to haue an Affirmatiue ſignification, as for example: *Caiphas* ſaid to Chriſt, Art thou a King? *Ergo*, He confeſſed Chriſt to be a King. Or when a word pronounced ironiouſly is turned to good earneſt, in ſpeaking one thing 5 *Accentus.*

and

and meaning another, as thus: My Maſter ſaid, Come hither, you honeſt man: *Ergo*, He ſaid that I was an honeſt man, when indeed he called him knaue.

6 *Forma Orationis.*

The Fallax of forme or manner of ſpeech may be diuers wayes, as firſt, when words are falſely ſuppoſed to be like eyther in ſignification, in caſe, or in gender, or to be of one ſelfe Predicament, becauſe they are like in termination, as *Poeta*, in Engliſh a Poet, and *Poema*, in Engliſh a Poeſie or poeticall worke: theſe two words, becauſe they end both in a: *Ergo*, they are both of the Maſculine gender. Alſo coloured and numbred are like in termination: *Ergo*, they are of one ſelfe Predicament, and yet the firſt belongeth to the Predicament of qualitie, and the other to quantitie. Secondly, when a word is vſed in one ſelfe argument, ſometime according to his proper ſignification, and ſometime as a terme of Arte: as for example, God is euery where: euery where is an Aduerbe, therefore God is an Aduerbe. A Mouſe eateth cheeſe, but a Mouſe is a ſyllable: *Ergo*, a ſyllable eateth cheeſe. Heere Mouſe in the Maior hath his proper ſignification, and in the Minor is vſed as a terme of Arte: and the like is to be ſaid of the word Euery where in the firſt example. Thirdly, when a word hath not his proper ſignification, or is not vſed according to the true phraſe of ſpeech wherein it is vttered, as thus: Whatſoeuer thou haſt not loſt, thou haſt ſtill, but thou haſt loſt no hornes: *Ergo*, thou haſt hornes. Heere this word, to loſe, hath not his proper ſignification, for wee are ſaid to loſe properly that which wee had, and not that which we neuer had. And finally, this Fallax is called the common refuge and receptacle of all ſuch kinde of Sophiſtrie. Hitherto of the Fallaxes in words, now of the Fallaxes in things.

CHAP.

CHAP. VI.

Of the Fallaxes in things.

OF theſe Fallaxes there be ſeuen kindes (that is to ſay) *Fallacia Aceidentis*, *à dicto ſecundum quid ad dictum Simpliciter*, *Ignoratio Elenchi*, *Petitio principij*, *Fallacia Conſequentis*, *Cauſa pronen cauſa*, *Plura interrogata pro vno reſponſa:* which may be Engliſhed thus: The Fallax of the Accident, the Fallax of ſpeech reſpectiue, in ſtead of ſpeech abſolute, ignorance of the Elench, Petition of the principle, a cauſe that is not the cauſe indeed, and many queſtions comprehended in one.

Define what theſe be, and giue examples.

Fallacia Accidentis, may be diuers wayes: as firſt, when any thing belonging onely to the ſubſtance of ſome thing, is attributed alſo to ſome accident of the ſaid ſubſtance, and contrariwiſe, as thus: Whatſoeuer thou haſt bought, thou haſt eaten, but thou haſt bought rawe fleſh: *Ergo*, thou haſt eaten rawe fleſh: heere the Conſequent is to be denied, becauſe the Maior hath reſpect to the ſubſtance, and the Concluſion to the qualitie. Another example, What I am, thou art not, but I am a man: *Ergo*, thou art none. Heere in this the Maior hath reſpect to the qualitie, and the Concluſion to the ſubſtance. Secondly, when Accidents are not rightly ioyned together, as when the qualities of the bodie are ioyned with the qualities of the minde: as *Homer* is a Poet, and *Homer* is blinde: *Ergo*, *Homer* is a blinde Poet: heere the Concluſion is to bee denied, becauſe to be blinde, and to be a Poet, are diuers qualities, whereof the one belongeth to the minde, and the other to the bodie, and therefore are not rightly ioyned together. Thirdly, as (*Melanchthon* ſaith) when an accidentall cauſe is is made a principall cauſe, as thus: *Elias* was an holy Prophet, but *Elias* was clad with Camels haire: *Ergo*, I being clad with Camels haire, am a holy Prophet. Heere the Concluſion

1 *Fallacia accidentis.*

is to be denied, becauſe to be clad with Camels haire, was not the cauſe of *Elias* holineſſe. But me thinkes that this and ſuch like examples doe belong rather to the Fallax of *Cauſa pro non cauſa* (whereof we ſhall ſpeake hereafter) then to the Fallax of the Accident.

2 *Dictum ſecundum quid.*

The Fallax *A dicto ſecundum quid ad dictum Simpliciter*, chanceth when we goe about to make a thing to ſeeme abſolute, that is ſpoken in ſome reſpect, or to be in all, when it is but in part, as a Moore hath white teeth: *Ergo*, a Moore is white. Againe, it may be in reſpect, by reaſon of time, place, perſon, compariſon, and ſuch like. Of time as thus: I ſaw *Iohn* yeſterday, but I ſaw him not to day: *Ergo*, I did ſee him, and not ſee him. Of place thus: It is not good to buy and ſell in the Church: *Ergo*, it is not good to buy and ſell. Of perſon thus: A Magiſtrate may kill a theefe: *Ergo*, euery man may kill a theefe. Of compariſon, thus: Riches are not good to him that cannot vſe them: *Ergo*, Riches are not good.

3 *Ignoratio Elenchi.*

Hauing now to ſpeake of the Fallax, called the Ignorance of the Elench: I thinke good to call againe to your remembrance the definition of an Elench before briefely ſet downe, which is a Syllogiſme rightly gathering a Concluſion contrary to the aſſertion of the reſpondent, which contrarietie conſiſteth of foure principall points or reſpects, whereof, if any be wanting, then the contrarietie is not perfect.

Which be thoſe foure points?

Firſt, that it be to one ſelfe thing. Secondly, in one ſelfe reſpect. Thirdly, in one ſelfe manner. And fourthly, in or at one ſelfe time: for if you be deceiued at any time by ſome falſe Elench, in thinking that it rightly gathereth a Concluſion meere contrarie to your aſſertion, when it is not ſo indeed, by reaſon that it faileth in ſome part requiſite and incident to a true Elench: then it may be rightly ſaid that you are deceiued by ignorance of the Elench, which Fallax, as *Ariſtotle* ſaith, comprehendeth almoſt all others, and therefore he maketh a long and obſcure definition of an Elench, rehearſing all the particularities thereof, nothing apt to be vttered in our Engliſh tongue.

Yet I pray you to giue examples of the foure chiefe points before mentioned.

Of the firſt, let this bee your example: foure is double to two, but not to three: *Ergo*, foure is double and not double; this is not to one ſelfe thing. Of the ſecond thus: This peece of timber is double in length to that peece, but it is not double to the ſame in breadth: *Ergo*, it is to one ſelfe thing, both double, and not double to one ſelfe thing, but not in one ſelfe reſpect. Of the third thus: This Prince ruleth mightily, but not mercifully: *Ergo*, he ruleth, and not ruleth; this is not in like manner. Of the fourth thus: I ſaw *Iohn* yeſterday, but not this day: *Ergo*, I ſaw him, and ſaw him not; this is not in one ſelfe time. And all theſe foure wayes in mine opinion are comprehended in the ſecond point; which is when any thing is ſpoken not abſolutely, but in diuers reſpects: wherefore it differeth not much from the Fallax of ſpeech reſpectiue before declared, ſauing that this Fallax is more generall, and comprehendeth more kindes of Fallaxes then that doth.

4 *Petitio principij.*

Petition of the Principle is, when the Antecedent doth not proue the conſequent, which chanceth moſt commonly three manner of wayes: that is, eyther when the proofe is as little knowne, as the thing that is to be proued. Secondly, when the proofe is leſſe knowne then the thing to be proued. Thirdly, when the proofe, and the thing to be proued, doe not differ, but is all one ſpeech, ſignifying one ſelfe thing, called of the Greekes *Tautologia*.

Giue example of theſe three wayes.

Of the firſt thus: The Sunne moueth not, but ſtandeth ſtill in the middeſt of heauen, giuing light to all the world: *Ergo*, the earth is moueable; or thus: The Heauens are not made of Elementall matter, ſubiect to corruption: *Ergo*, the Heauens are incorruptible. Heere in both theſe examples the Antecedent is as doubtfull as the Conſequent, and therefore prooueth nothing. Of the ſecond way thus: Euery ſenſible bodie ſometime ſleepeth: *Ergo*, Man ſometime ſleepeth. Heere it is more to be doubted whether all ſenſible Bodies, all Beaſtes, Fowles and Fiſhes, doe ſometimes ſleepe or not, then whe-

ther man doth sometime sleepe: for it is an easier matter to knowe the nature and propertie of one speciall kinde, then of all, or many kindes. Of the third way, thus: *Iohn* is learned: *Ergo, Iohn* is learned. The soule doth liue euer: *Ergo*, it is immortall.

5 *Fallacia Consequentis.*

The Fallax of the Consequent chanceth two manner of wayes, that is, either when wee thinke the Consequent to be conuertible with the Antecedent, but it is not so in deede, or else when we thinke, that vpon the contrary of the Antecedent, the contrary of the Consequent must needes also follow.

Giue examples of both these wayes.

This is a man: *Ergo*, it is a sensible body: now if I would hereof by conuersion conclude thus: it is a sensible bodie: *Ergo*, it is a man: this were no good Consequent; for euery sensible bodie is not a man. Likewise when it raineth, the ground is wette: *Ergo*, when the ground is wette, it rayneth; for these speaches are not conuertible. Of the second way thus: It is a man: *Ergo*, it is a sensible body. It is no man: *Ergo*, it is no sensible body. Here you see that this Proposition, it is no man, is the contrary of the first Antecedent, which saith, It is a man. Of which contrary, the contrary of the Consequent doeth not necessarily followe: for though it bee no man, yet it may be some other sensible bodie. This Fallax comprehendeth all such false Arguments, as do not obserue the Rules of right and true Consequents before giuen.

6 *Causa pro non causa.*

The Fallax of *non causa pro causa*, is, when that thing is made to bee the cause of the Conclusion, which is not the cause in deede; as Wine is naught, because it will make a man drunke. Of which drunkennesse, Wine is not the cause, but the intemperance of the man, and his immoderate vse thereof, for many things that be good of themselues may bee abused, yea, euen the libertie of the Gospell, and yet the doctrine of the Gospell is not cause thereof, but the malice of man abusing the same.

7 *Plura interrogata pro vno responsu.*

The seuenth and last Fallax, is when vnaduisedly, and without vsing any distinction, you make an answere to manie

questions,

queſtions, as though they were but one; as for example, The Sophiſter, ſeeing two men ſtanding together, whereof the one is blinde, and the other hath his ſight, will aske you perhaps whether they ſee, or not; whereunto if you anſwere directly, either yea, or no, you are by and by taken: for if you ſay that they ſee, then you grant that the blind man alſo ſeeth, and if you ſay, that they doe not ſee, then you grant, that he which ſeeth, is blinde; but if you anſwere, that the one ſeeth, and the other not, you ſhall by ſuch diſtinction eaſily auoid the Sophiſters cauillation: for diuers queſtions hudled vp in one, doe alwayes require diuers anſweres. And thus I ende, with the order of confuting all falſe Elenches, and Fallaxes; the knowledge whereof is very neceſſary, for the maintenance of the trueth, which God loueth, who is the fountaine of all trueth, yea, and very trueth it ſelfe; to whom be all honour, glorie and prayſe, world without end,

Amen.

FINIS.